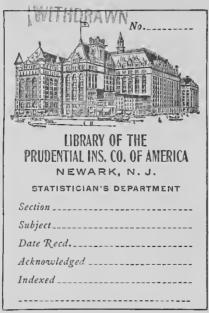


H 61





47704

Date Due JAN 2 6 1960 MP CAT. NO. 23233 PRINTED IN U. S. A.

H61 .P31

The theory of social forces.

3 1924 030 365 666



The original of this book is in the Cornell University Library.

There are no known copyright restrictions in the United States on the use of the text.

SUPPLEMENT TO THE ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE,

JANUARY, 1896.

44.1

...The...

Theory of Social Forces

BY

Simon N. Patten, Ph. D.,

Professor of Political Economy in the Wharton School of Finance and Economy,
University of Pennsylvania.

PHILADELPHIA:

AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE.

1896.

: MIM

CONTENTS.

INTRODUCTION.

CHAPTER I.

| | THE INFLUENCE OF THE ENVIRONMENT. | |
|-------------|--|------|
| | | AGE. |
| | The Relation of Economics to Biology, | - |
| | The Causes of a Progressive Evolution, | |
| ₹ 3. | The Obstacles to a Progressive Evolution, | II |
| 84. | The Requisites for Survival, | 14 |
| | - | |
| | | |
| | CHAPTER II. | |
| | RACE PSYCHOLOGY. | |
| § 1. | The Mental Mechanism, | 18 |
| ₹ 2. | The Classification of Ideas, | 22 |
| å 3. | The Basis of the Present Hypothesis, | 26 |
| | The Self-Conscious Centre, | |
| | The Development of the Sensory Feelings, | |
| | A Classification of the Motor Feelings, | |
| | The Defects in the Reasoning of Locke and Hume About | |
| 6 / . | the Powers of the Mind, | |
| 2 8 | The Mechanism of Belief, | |
| - | A Restatement, | |
| 8 9. | A Restatement, | 43 |
| | | |
| | CHAPTER III. | |
| | Knowledge and Belief. | |
| 8 I. | Local and General Environments, | 49 |
| | The Subjective Environment, | |
| | The Extension of Knowledge, | |
| | The Theory of Conviction, | |
| | The Analysis of Reasoning, | |
| | The Modification of Belief, | |
| ų О. | | 70 |
| | (3) | |

4 Annals of the American Academy.

CHAPTER IV.

| | A SOCIAL COMMONWEALTH. |
|-------------|--|
| δı. | The Transition from a Pain Economy to a Pleasure Econ- |
| • | omy, |
| ₹ 2. | The Characteristics of a Pleasure Economy, 80 |
| ₹ 3. | The Economic Bonds, 85 |
| ê 4. | The Social Bonds, |
| § 5. | The Social Man, 95 |
| ξ 6. | Social Morality, |
| ê 7. | Social Religion, |
| | CHAPTER V. |
| | Normal Progress. |
| 8 т. | The Stages of Social Progress, |
| | The Greater Humanity, |
| | The Race Ideals, |
| | The Misapplication of General Principles, |
| | The Civic Instincts, |
| | The Democratic Ideals, |
| | The Progress of Cities, |

THE THEORY OF SOCIAL FORCES.

INTRODUCTION.

The present essay is an attempt to recast current social philosophy and to introduce into it elements which thus far have been overlooked. In our social speculations we are still dominated by eighteenth century philosophy. Even the theory of evolution has had as yet but little influence on the social concepts and ideals of the race. Individualism seems as firmly established as ever and has on its side many of the highest scientific authorities.

I question whether the hold which this social philosophy has on the popular mind can be shaken, by an appeal to inductive evidence. This hold depends upon certain concepts and ideals which have received classical statement at the hands of our ablest thinkers and which cannot be displaced by unorganized facts. In order to have any degree of success a new social philosophy must present doctrines and ideals which are equally clear and have their elements equally well correlated.

It is my belief that the older philosophy does not rest on general principles, but is grounded on the series of environments in which the race has lived. The present environment of the race is so different from its predecessors that a new social philosophy is demanded to explain its effects. A failure to recognize changes in the environment is the main source of confusion in current discussions. My method may not lead to the solution of all social problems, but it at least clears the ground and shows how and where subsequent work of a more inductive character can be done.

It is perhaps necessary to caution the reader against the assumption that the social commonwealth which I have described is, in my opinion, the highest or even a final social state. While it is yet too early to predict what kind of a society will follow it, we know enough of its tendencies to

see that it may not be able to satisfy all the aspirations of men. If a progressive evolution continue, other societies will be possible, each of which will differ from its predecessor as radically as the society I describe differs from our present society. The desire for a still higher form should not be made the ground of an opposition to the study of the social conditions resulting from the pursuit of pleasure. Only when the more elementary facts about such a society are understood can the foundations of higher social states be discussed with profit. This essay attempts merely to start discussion along the right track and not to describe the ultimate form which society is to assume.

I feel that I must make an apology for injecting so much pyschologic discussion into this essay. To many readers this will seem foreign to the subject and may arouse prejudices which will interfere with a correct appreciation of the other parts. It should, however, be kept in mind that every social philosophy has, as its basis, some theory of psychology. The doctrines of Locke and Hume have proved a most admirable basis for the old social philosophy. They ignore, however, the elements upon which the social forces rest. A new social philosophy cannot pass beyond the inductive stage until these factors are recognized and a picture of mental activity constructed which emphasizes the elements neglected by the old philosophy. Even if the type of psychology which I present is faulty, it can at least serve as a provisional philosophy until psychologic research is far enough advanced to furnish a better basis. The assumptions I make are neither different in kind nor greater in number than those of the philosophy it seeks to displace. If a few of its prominent ideas have in them elements of truth, the correctness of the details is of less consequence. They are inserted in order to create a definite picture of mental phenomena and thus to give my ideas some of the advantages which frequent restatement has given to the familiar ideas of the older systems of thought.

CHAPTER I.

THE INFLUENCE OF THE ENVIRONMENT.

§ 1. The Relation of Economics to Biology.

Evolution has thus far been studied as a problem of biology. This has been due more to what I would call a happy accident than to any necessity of the situation. admits that he obtained the clue to his theory through reading Malthus' "Essay on Population," and in many respects the attitude of the author of the "Origin of Species." is that of an economist. It is only by later writers that the economic elements in the problem are neglected and that the theory is based solely upon biologic evidence. The happy accident to which I have referred is the fact that the history of past organic life is so plainly recorded in the various organisms of the present and in the fossil remains of earlier This enables the student to use the historical and comparative method of investigation and from his series of observations to infer what was the order of organic evolution. The organic world is not a world of causes but of effects, and hence the historical method is the only one of which the biologist can make use in studying the processes of evolution.

The fundamental contrast in evolution is that of environment and organism. The environment is made up of a group of conditions to which the organism must adjust itself. These conditions are, as compared with the organism, permanent and in their ultimate form unchanging. The organism is mobile and short lived. If an adjustment is to be made between the environment and an organism, it is the latter that must change. We have, therefore, between the two factors of evolution a causal connection. Causes lie in the environment, effects show themselves in the organisms.

The facts of evolution can be studied deductively only by beginning with the environment and tracing the influence of its conditions upon the organisms seeking adjustment. Inductive studies, however, must begin with facts about the organism and from them the student must seek to discover the conditions of the environment which has determined its evolution. If evolution is studied through its effects on organisms, the study is plainly in the field of biology. If, however, we seek in the environment for the causes of evolution, it is equally plain that the study lies in the field of economics—the science of utilities and of goods.

The environment of an organism is not the whole objective world, but only those parts of it which affect its welfare. The objects surrounding each organism may be divided into three parts: Those that are the cause of pleasure or of welfare, and therefore desirable; those that are the cause of pain or of destruction, and therefore to be avoided; and finally, all indifferent objects which are of no importance to the organism. The first two classes of objects make up the environment of an organism, which expands or contracts as a greater or smaller number of objects affects its welfare.

The environment of a particular organism is not, therefore, an unchanging whole made up of the sum of all objective conditions, but consists of a varying number of desirable or undesirable objects. There are, therefore, innumerable possible environments to which organisms can adjust themselves. Each organism seeks for that environment where there is a maximum of favorable and a minimum of unfavorable conditions. It desires to secure goods and to avoid evils. The problem thus presented is an economic problem and its study belongs to economic science. Every organism has its economy based upon the objective conditions by which it is affected. The economy of higher organisms is much more complex than that of the lower organisms, but the principles are not different. There is always an endeavor to increase pleasure and to avoid pain if the animal

is conscious of these emotions; and even if consciousness is not yet fully developed certain instincts and habits protect the organism and lead it to avoid evils.

The theory of goods in economics is in reality a study of the environments of organisms. It seeks to discover what objects increase their welfare and what are the means by which disagreeable objects can be avoided. Objects are of importance to organisms not as objects but only as goods or evils. The environment of each organism is the sum of its economic conditions and the environment changes as these conditions change. If this be true the causes of evolution lie in economic conditions and their effects show themselves in organisms. A series of organisms is a history of the effects of evolution; a series of groups of economic conditions can give a picture of its causes. There are, therefore, two methods of studying evolution—the one deductive, the other inductive. Our knowledge of it will not be complete until both economics and biology are fully utilized to throw light upon its intricate problems.

§ 2. The Causes of a Progressive Evolution.

The discussions on evolution have been largely concentrated on organisms and their development, and but little attention has been given to the conditions in the environment which have produced these organisms.* For these reasons a progressive evolution has been accepted as a fact without any examination into its causes. It is possible to imagine a planet on which the lower forms of life would be supreme and where there would be no tendency for higher types to displace the lower. If on our planet the higher

^{*&}quot;Throughout biology proper, the environment and its correlated phenomena are either but tacitly recognized, or, if overtly and definitely recognized, are so but occasionally; while the organism and its correlated phenomena practically monopolize the attention." Spencer's "Psychology," Vol. i, p. 134.

[&]quot;In brief, then, the propositions of biology, when they imply the environment at all, imply almost exclusively its few general and constant phenomena, which, because of their generality and constancy, may be left out of consideration." *Ibid*, p. 135.

forms of life tend to survive there must be conditions in their surroundings which give them an advantage. It is of no use to examine the organisms or the principles of life to discover the cause of survival; for organic life is plastic and can assume many forms. If any one form tends to displace others its survival is due to some external condition of which other forms could not take advantage.

The environment of any organism is not the sum of all the objects surrounding it. The mass of them are indifferent and relatively but few furnish the real environment of any being. The goods and evils of each being are a definite part of the objective world and its welfare depends upon There are thus an indefinite their abundance or scarcity. number of environments, each giving certain possibilities. to animals adjusted to them. A progressive evolution depends on the power of moving from one environment toanother, and thus avoiding the stress of competition. one environment once occupied is soon filled with strugglingbeings. There is no hope of further progress unless a transition to some other environment is possible. But even a multitude of environments would not lead to a progressive evolution unless each member of the series presented slightly more complex conditions so that animals of the lower orders. would be shut out of the more complex environments and thus compel a mental evolution to accompany each transition from one environment to another.

This proposition can be best illustrated by taking the food supply as an example of the conditions determining the power to survive. With the lower animals the food supply is so important an element that others may be overlooked. If the food supply depended on such simple conditions that all of it could be utilized by a low type of animal life a progressive evolution would be impossible. The higher types of animals would have no advantage over the lower and thus all progress would be blocked. In our world, however, the low types of animals can acquire but a small part of the possible

food supply, and hence their increase soon reaches definite limits. Each higher type of animal finds a new supply of food from which lower animals are shut out and thus has an advantage and secures a separate environment in which it can survive. This new environment may be in another region or it may mean a better utilization of the locality already occupied. Each progressive nation passes through a series of environments even though its geographical position has not been changed. The English people of the Middle Ages had not the same environment as the English people of to-day, although they occupied the same island. The introduction of root crops, machinery and railroads, the improvement of live stock and waterways, the opening up of coal and iron mines, the extension of commerce and the growth of cities have made new objects of interest to the English people and have thus given them a new environment in each age.

A similar series of conditions determine the development of other nations. Progress can continue only so long as adjustments to new groups of conditions are possible.

§ 3. The Obstacles to a Progressive Evolution.

An explanation of the process of evolution depends upon our knowledge of three groups of facts, which are the subject-matter separately of biology, psychology and economics.

In the first place organisms must be studied so that the relation of the organs to one another and the causes of their growth and decay may be understood. These problems belong to biology. With this group the psychic problems are often placed. The psychic factors of evolution, however, have a peculiar place and deserve a rank equally with the biologic factors. But it is not all of biology nor all of psychology that has an importance in the theory of evolution. The simple elements of each science have not the interest to students of this theory that certain of their complex forms have. In other words, it is the arrangement of the

elements of each science, and not the elements themselves, that are of supreme importance. Darwin's "Origin of Species," which did so much to establish the theory of evolution, is not a discussion of cell life, of spontaneous generation, or of unicellular organisms. It is rather a discussion of organs. The peculiarities of animals which determine their species are mainly the arrangement and relative growth of their organs. Organs were studied before cells and have a more direct bearing on the problems of evolution.

In psychology also it is not the ultimate facts of consciousness nor the composition of the nerve fibres and currents that need investigation by the evolutionist. It is the mental mechanism in which his interest lies. By this I mean the arrangement and co-ordination of the various nerve centres so that effective results are produced by the psychic processes. It is not consciousness, but a clear consciousness, that has an interest. So also the interest is not in mere bodily activity, but in the definite motions which effect an adjustment to the external conditions. Clear perceptions of the environment and the power of definite adjustments depend on the mental mechanism, and it, rather than the ultimate facts of psychology, must be studied to show how a mental evolution is possible.

The third group of facts demanding explanation come from the objective world which forms the environment of organisms. And here again the interest is not in the ultimate facts about the atoms and forces which make up the inorganic world, but the peculiar arrangements of these atoms and forces. The atoms have aggregated themselves into worlds and these worlds through a series of geological changes have assumed a definite form. The static crust of a given world forms the background of the evolution of the particular organisms which inhabit it. They must adjust themselves to its possibilities and have their progress determined by its peculiarities. If any of the elements of a progressive evolution are lacking or difficult of access because

of the peculiarities of this crust, the evolution of the creatures on its surface is prevented or retarded.

It is necessary to emphasize the static character of the crust of the earth because this fact is the cause of all the peculiarities in the evolution of organisms. The definite arrangement of the parts of this crust gives to organisms a more or less complete series of environments by the aid of which their evolution becomes possible. This series of environments cannot be changed, and beings in passing to the next in the series must undergo a double series of changes —one to fit them for the peculiarities of the new environment and the other to acquire the normal characteristics which lead to progress. Oftentimes the next step in what might be called the ladder of progress is lacking and then the being must take an indirect route and pass through many changes in its organs and mental mechanism which have no other end than to supply the gap due to the missing step in the Peculiar groupings in the inorganic mechanism demand peculiar grouping of organs, nervous centres, ideas and When an obstacle is once overcome and the being has returned to the normal line of progress it has no further use for the peculiarities of the preceding stage of progress and they become a block to progress, often being the cause of still further irregularities in the subsequent evolution.

All obstacles to or peculiarities in progress have their origin in the defects of this ladder of progress, that is, in the imperfect series of environments which the crust of the earth affords. The organs and the mental mechanism of beings are two factors of evolution which are plastic and can be modified in any direction. They are, therefore, constant factors in evolution, and if they alone were concerned evolution might be easy, regular and rapid. They are as dynamic as the crust of the earth to which adjustment must be made is static. For possibilities of evolution, the vital and psychic processes must be studied. For its peculiarities and defects, however, the environment must be

studied. It shows the obstacles to progress and the relations between the succeeding stages of evolution.

§ 4. The Requisites for Survival.

An environment is usually thought of as a unit made up of the totality of objective conditions. The adjustment to these conditions is looked upon as the goal of progress, and the process of adjustment is a slow one running through many ages. The adjustment seems to depend upon a multitude of minor conditions, each of which has a slight influence on the welfare of the organism and the sum of which. compared with a similar sum to which a rival being is adjusted, determines the power to survive. If, however, we use the term environment in a more restricted sense, meaning the sum of conditions upon which the welfare of an animal at a given time depends, the emphasis is changed from the gradual adjustment to an ideal environment to the definite steps needed to transfer an animal from its present environment to an adjacent one in which it will be more protected from competition.

Static animals are always adjusted to their environment. Among them competition is direct and survival depends on superiority of physique. Progressive animals avoid competition by surmounting some condition which will free them from a struggle with equals or superiors. The progressive animal is not that one whose sum of adjustments to the old environment is greatest, nor that one which has the best average adjustment. Such animals remain static because they can control the old environment. Progress depends rather upon the animal's possession of a capacity to adjust itself to a new environment and thus to escape competition.

Progress is of two kinds. Static progress increases the sum of adjustments or the average adjustment to a given environment and thus gives to an animal the power to survive in this environment. This kind of progress is limited

and is usually of a physical character. The animal grows more vigorous and gets better means of defence, but its mental powers remain the same. The second kind of progress is dynamic and leads to the acquisition of new mental qualities by which adjustment to a new environment is possible. Some obstacle insurmountable to the static animal prevents its acquisition of a new environment. The single aim of progressive animals is to escape from competition; the single means is to secure control of that quality which opens to its possessors a new environment. This essential quality for success I shall call the requisite for survival. obstacles to its acquisition are removed, all other obstacles are easily surmounted. The requisite for survival may assume many forms. It may be the means of increasing the food supply, or it may be the means of securing safety. An animal may have plenty of food in its environment, so that it need not suffer on that score, yet its enemies may press it hard. If it secures some means of avoiding them its welfare is assured. In this case a place of safety is the requisite for survival since all the other conditions of success are present in abundance.

If there were no obstacles delaying progress until the proper requisites for survival were found, the older species would be the most advanced and have the most intelligence. Man, however, is thought by zoölogists to have a shorter line of ancestry than some other species over which he has a mastery. The more rapid progress of the human species does not seem to have been due to any inherent superiority, but results from conditions giving to it a better series of requisites for survival than other animals have had. The carnivora and ungulata seem at one time to have had, in this respect, an advantage over the ancestors of men.*

The relative progress which men had made in the new and in the old world before the discovery of America, shows

^{*}See Lester F. Ward's "Relation of Sociology to Anthropology. The American Anthropologist, July 1895.

also how progress depends upon the requisites for survival. The number of animals and vegetables of use to man were much greater in the old world than in the new and the greater progress of men in the old world seems to have been due to this fact.* America possessed but few draft animals and these were of an inferior character and limited to certain There were no animals which by domestication localities. could furnish a substantial supply of food. Nor were there any animals valuable for their milk. The inhabitants of the new world seem to have utilized their resources as well as did those of the old world. The difference in the rate of progress was due, not to differences in the races inhabiting the two areas, but to differences in the aids which nature gives to progress. America lacked certain requisites for survival which were supplied to those living in Asia.

In the social relations of men this principle of a requisite for survival is ever present. The different agents in production have different rates of increase. There is always one agent, the supply of which is relatively short and the value of whose services command a monopoly price. There is a stimulus for members of the society to develop those qualities through which this agent is increased. The classes having these qualities are freed from competition, while classes without them suffer from the increased pressure of competition. Capital, for example, in the first half of this century was the most slowly increasing agent of production and therefore the requisite for survival. The capitalistic classes escaped from competition by developing the instinct of saving, and thus pushed society into a better environment. At present, intelligence—the ability to manage large industries—seems to be the requisite for survival. Through the development of ability and intelligence the entrance into a better environment is made possible.

When the need of a new requisite for survival becomes apparent, the possession of old inherited qualities is of

^{*}See Payne's "History of America," Vol. i, p. 311.

little importance in the struggle for existence. No matter how well developed, these do not relieve their possessors from the stress of competition. These persons must expect to see the benefits of progress fall into the hands of those who possess the requisite for survival, while they may themselves be worse off than if no progress had been made. The new class may not only secure all the benefits of increased prosperity, but compel the static classes to give up a part of what they would have secured if the old conditions had continued. The requisite for survival is. therefore, the all-important element in periods of transition. The general adjustment of men or societies to nature is for the moment of little importance. Some new obstacle bars the way to progress and some new quality is needed to surmount this obstacle. Upon this new quality the power of surviving depends and all the forces of evolution further its development and reward those in whom it first appears.

CHAPTER II.

RACE PSYCHOLOGY.

An Hypothesis to Account for the Origin of the Social Forces.

§ 1. The Mental Mechanism.

The obstacles to progress due to a series of requisites for survival must be surmounted by the development of the The possibility of a progressive evolution depends upon the conditions of the objective world creating a series of requisites for survival, its realization, however, depends upon the development of new mental qualities. The simple elements of which the mind is made up must be combined in new forms to meet these new conditions. be an increase in the number of centres in which thought is developed or these centres must be put into new relations to one another so that the aggregate effect of mental activity may be heightened. The society of centres, to use a social analogy, must develop more intricate relations, and a division of labor among them must increase the efficiency of their activity.

The simple elements of the mental mechanism are few and their power when in isolation small. The requisites for survival could not be secured if these elements remained in their simplest form. When united in certain ways they create instincts, impulses, memory and imagination, and these when organized become conscious thought. Each requisite for survival demands a change in the mechanism of the mind in some particular direction and when secured, a new quality is added to the mind which becomes in turn a lever by which the next obstacle to progress is overcome.

A study of mental phenomena from this standpoint emphasizes the mechanism of the mind much more than does

an analysis of the elements of consciousness. An economic illustration will make this distinction clear. Suppose society to have developed an effective desire for more cloth than is now produced. The increase may be secured in either of two ways without increasing the amount of capital or labor devoted to the cloth industry. The weavers and other persons engaged in the manufacture of cloth may become more intelligent and skillful, and so more efficient producers; or there may be introduced a more minute and efficient division of labor, workers with their present individual efficiency being organized in such a way as to increase the product. In the first case the units are changed; in the second the change takes place in the mechanism through which the units act.

It has been customary to assume that the mind is a unit; that improvement is due to a change in the character of the mind similar to those which are seen in a laborer who rises from a lower to a higher grade. It has been overlooked that the improvement may be due instead to changes in the mechanism of the mind, *i. e.*, to changes, not in the qualities of the centres which together create mental activity, but in the relations which exist between these centres.

If it be considered permissible to regard the mind as a complex resulting from the activity of a number of separate centres, there will result two distinct lines of possible investigation. One is an examination into the construction of the centres, the other is an examination into the mechanism by which the centres are united and brought into harmonious relation. If it proves possible to analyze the centres into their simple elements it may be found that the former of the proposed investigations will resolve itself chiefly into an examination of the changes in the mental mechanism rather than of changes in the most elementary mental elements. In this case all improvement in mental power would ultimately be seen to result from improvement in mental mechanism. There would then be no task for

introspective or physiological psychology except the discovery of the simple elements of thought and their connection with the physiology of the nervous system.

It is upon this supposition that the reasoning of the present essay is based. It is assumed that there are certain simple elements of thought distinguished by introspection, and certain elements of the nervous system discovered by a physical analysis of the brain; and that by different arrangements of these elements the various forms of mental activity are secured. If these assumptions are even in a measure correct, a new type of psychology arises which concerns itself solely with the mechanism of the mind.

Sociology furnishes a useful illustration. who had no knowledge of the individuals that compose society to be observing the operation of certain social institutions such as the church, the factory, the city, the nation. It would be impossible for him to explain any one of these phenomena in terms of the others. Churches do not when aggregated become factories factories do not constitute cities. nor are cities the units out of which nations are made. When, however, it is recognized that the unit from which all the institutions are formed are men, then it is easy to see the relations that exist between the institutions formed by the aggregations of men on various principles. institutions are merely the mechanism of society, and the problems of this mechanism are distinct from those which relate to the qualities of the individual members of society. The individual man may be studied profitably from various standpoints, but his social nature cannot be understood until there has been an analysis of social institutions. principle holds good in its application to the mechanism of the mind and the elements of thought. It acquires even greater importance because of the fact that the units cannot be isolated and studied directly. They can be known only by inference from the joint effects of all the units in their various combinations.

We are accustomed to the thought that society is an organism and should be studied by the methods of biology. I desire to reverse the figure and to study the mind as if it were a society of conscious units organized into a mechanism for common ends. The difference between that society of conscious units which we call mind, and a society of human beings on our planet, is in the completeness of the mechanism. Many ages of mental progress have brought the units of the mind into complete harmony with one another, while in human society we have as yet but an imperfect manifestation of the possibilities of a social mechanism.

I shall make no attempt to explain why states of consciousness accompany or result from the activity of nervous The connection between the two sides of mental life will be accepted as a fact, the explanation of which belongs to another department of psychology. It will be assumed that in the development of an organism there is a tendency to create a group of conscious centres. mental mechanism of beings is a result of this tendency. These centres in advanced beings must be co-ordinated in a way that gives clearness and vividness to thought. mere consciousness, but definite consciousness, the power to have clear concepts of the environment is the phenomenon which race psychology has to explain. Just as the origin of species needed to be studied apart from the problems of cell life and of the possibility of spontaneous generation, so the relations between conscious centres needs to be studied apart from problems concerning the contents of these Their relations must be understood before the deeper problem of the origin of consciousness can be solved. The connection between complex nervous relations and complex conscious states can be explained without knowing why or how a simple nervous current can excite a state of consciousness. Race psychology can explain only phenomena that are of a complex nature.

§ 2. The Classification of Ideas.

The test of a simple idea has, perhaps, seemed so obvious to those who use the term that an accurate definition is not needed. Yet there lurk in it two meanings which need to be contrasted.

The mind is the means by which the organism keeps itself adjusted to its environment. To effect this adjustment two classes of ideas are necessary. The one class gives the organism a more or less definite concept of surrounding objects; enables it to discover its relations to the different parts of its environment, to distinguish between them and to determine their properties. In some way a correspondence grows up between the ideas of the organism and the parts of the environment, so that from the former the presence of the latter may be inferred. These ideas are knowledge-producing ideas, and upon their clearness and definiteness the possibility of improved adjustments between the organism and its environment depends.

An organism needs, however, more than a knowledge of its environment. It must have the power to create movements which will lead to an adjustment to external conditions. It must also have ideas of how these movements can be made. These ideas of movements must be more than mere knowledge. They must in and of themselves have the power by which these movements are realized. Their very presence must insure that the movement is made.

There are then knowledge-producing ideas which give information of the environment and action-producing ideas which create the movements in the organism which lead to an adjustment between it and the objects of which it has knowledge. These two kinds of ideas cannot be classified on the same plan. A simple element of knowledge is not a simple element of action. We must classify each group of ideas according to its own characteristics.

Knowledge ideas—those of the environment—are either clear or obscure. An organism has a clear idea when some

element is so reproduced in its mind that its relations to this portion of its environment are evident. It has obscure ideas when its immediate environment is not reproduced in its mind in such a way that definite adjustments are possible. Action ideas—those which produce movements in the organism which lead to an adjustment, are vivid or faint. Vivid ideas drive other ideas out of the consciousness and force the organism to act in a particular way. Faint ideas have no such power of acquiring exclusive attention and either lead to no action or to actions which are of little service to the organism.

It is not necessary that an organism which has vivid ideas should have also clear ideas. Nor can it be said that clear ideas are always vivid. One organism with very obscure ideas of its environment may act with force and energy whenever these ideas arouse its activity, while another organism with the clearest ideas of its environment may be sluggish in its activities and fail to make those better adjustments which its clear ideas would permit. Clear ideas may be faint and vivid ideas may be obscure.

From these facts it seems plain that ideas are the product of the mechanism of the mind, and that this mechanism is not single but double. One type of mental development leads to more clear ideas of the environment, while another type leads to more vivid ideas upon which action is based. It seems probable also that this double mechanism for mental activity corresponds to the double division of nervous currents upon which mental activity depends. If the sensory or ingoing currents are well organized they convey to the mind clear ideas of the environment. If the motor or outgoing currents are highly developed, the organism has vivid ideas and acts with vigor and promptness. The degree in which the ideas of an organism are vivid and clear depends upon the development of these two parts of its mental mechanism.

It will, I think, be generally recognized that clear ideas

belong to the sensory mechanism and depend upon its de-It will not, however, be so readily admitted velopment. that vivid ideas are motor feelings and depend upon the development of the motor mechanism. It is usually held at least by the empirical school of psychologists—that all our feelings are sensory and depend upon the ingoing neryous currents. Without stopping to discuss the philosophy involved in this issue, it will, I think, be conceded that there is an inductive connection between vivid ideas and the development of the motor mechanism. Vivid ideas all relate to the mental states of the organism and tell nothing of the environment. They are the pleasures and pains of the organism, its desires, its passions and its beliefs. They are tendencies to activity, and if they are not motor feelings they are so intimately connected with the motor mechanism and so different from other sensory feelings, that there can be no practical error in calling them motor feelings.

According to this classification, the sensory feelings convey to the mind only ideas of the environment, while the motor feelings give it only ideas of the organism. Clear ideas relate to things objective to the organism; vivid ideas relate to its subjective states. The self of the organism is revealed only in vivid ideas. Its clear ideas are all of things external to the self. It is true that the higher organisms have clear ideas of some of their parts, but they get these clear ideas only by making the parts of which they have clear ideas objective to themselves and thus a part of the environment. We have, for example, clear ideas of our hands. We think of them, in terms of the environment, as being made of material and having form, color and weight. This objectification of the parts of the organism, however, is only possible when several senses are well developed. The clear ideas we have of the hand do not come from it. but indirectly from other organs when the organism is pas-To the eye, for example, the hand is objective—a part of the environment.

When, however, an organism is active all its clear ideas relate to its environment, while all its ideas of itself or of its parts are vivid. The hand ceases to be an object of analysis and becomes again a part of self. It is known only through the vivid ideas which make it a means of promoting the activity of the organism. Even when an organism has clear ideas of itself the ideas are not simple ideas. Some element of vividness is mixed with these clear ideas before they can be predicated as a part of self. for example, that my hand is long and thin, the feelings back of these ideas are not all clear and sensory. are also some motor feelings present in consciousness which blend with these clear ideas. If this is not the case the hand is purely objective, a part of the environment and not united in any way with the organism. The hand is made a part of the organism, not through the clear ideas of which the sensory nerves bring in, but through the vivid ideas which the outgoing motor forces create. When "I," "my," or "me" is a part of the proposition the group of feelings for which it stands cannot be analyzed into clear simple sensory ideas. Without a tincture of motor feelings the proposition lacks reality and would not create conviction. Vivid and clear ideas are, to say the least, organically differ-They depend upon the development of different parts of the mental mechanism. The peculiarities of this mechanism may emphasize the one of these elements at the expense of the other and thus give the basis for a defective philosophy which neglects or ignores the other element. A more careful investigation will, however, show the importance of the neglected element and bring the two parts of every organism into proper relation. Both the motor and sensory forces show their effects in consciousness and create peculiar ideas differing too widely to be brought into a single classification.

In many ways this difference between clear and vivid ideas has been recognized but a confusion in the use of terms

has prevented the distinction from receiving general attention or assent. Locke, for example, uses the term "idea" in the sense of knowledge-producing ideas. His problem is an analysis of knowledge, and this analysis is successful so long as it relates to the environment. He ignores the vivid organic ideas or at least fails to give an adequate explanation of them. Hume, however, has as his problem, not the explanation of knowledge, but of belief and conviction. He uses the term "idea" in harmony with his problem and divides ideas into two classes, vivid and faint. This classification is possible because his attention is given to the action-producing ideas that create conviction. While he often speaks in a general way of the sensations which produce knowledge ideas, he makes no attempt to analyze them. His illustrations are all taken from action-producing ideas. The analysis of the passions, desires and emotions monopolize his attention, while he leaves the examination of external sensations to anatomists and natural philosophers.* He can, therefore, easily divide the ideas of interest to him into two classes, vivid and faint. The knowledge-producing ideas of Locke are as completely ignored in this classification as are the action-producing ideas in Locke's classification. The work of both these authors must be brought: into some organic relation before all the mental forces are explained. It is a common mistake to assume that their problems were the same, and that their explanations relateto the same set of phenomena.

§ 3. The Basis of the Present Hypothesis.

The plan of the nervous system is simple. There are two kinds of nerves, those which conduct currents toward the centre of the system and produce sensation, and those on which currents move toward the surface of the body and produce motion.

The simplest form of activity is the nervous arc. An *Hume's "Treatise of Human Nature." Book i., § 2.

afferent nerve carries a current from the surface of the body to a nervous centre. There a reaction takes place and a return current passes over an efferent nerve to some muscle, causing it to contract. Innumerable duplications of this simple arc make the basis of the nervous system. It is not complete, however, until the various centres are connected with one another so that excitations at any one centre are communicated to other centres. Descriptions of the nervous system are so familiar that I need not repeat them here. For my purpose they are merely data upon which certain hypotheses rest.

Nervous currents are either primary or secondary. The primary current started at the surface of the body is carried to a centre or to a series of centres. A secondary current is due to the excitation of a centre by a primary current. In this way a new current may be started which will in turn stimulate some other centre or centres. Centres far from the surface of the body may never feel the force of the primary currents. They are aroused to activity only by the secondary currents started by primary currents.

In any network of centres like the human brain the secondary currents are of the greater importance. They bind the various centres into a harmonious whole by reflecting sensations from one centre to another. When any centre is excited by a current, it creates a new current which imparts to neighboring centres the sensations it receives. The whole mind is thus aroused to a similar activity and the effects of the primary current become more pronounced.

Primary currents are strong but obscure. The process of reflection separates from each other the elements which are united in the obscure currents from the lower centres nearer the surface. In this way these elements are purified by isolation, and each one is carried to that centre most fitted to receive it. The sensations of the higher centres*

^{*}By higher centres I mean simply those whose contact with the outer world is least direct.

are thus pure and clear because these centres are excited only by some peculiar quality of the primary current. The sensations of the lower centres are composite and obscure because the currents which arouse their activity are diverse in their composition.

In addition to the sensations due to the sensory currents, feelings are also aroused in certain centres by the motor currents that pass through them. If a centre is a part of a complex mental mechanism, it may be excited to activity by motor currents coming from the more central parts of the system. I shall assume that motor and sensory currents create distinct feelings in consciousness, and that a part of its complex phenomena is due to their interaction. It would harmonize with my hypotheses if motor and sensory currents differed only in their intensity, and in the rapidity of their movement. The sensory currents move, I think, more slowly and at a lower tension. The motor currents are stronger, move more rapidly and make a more vivid impression on consciousness.

Since the motor currents move more rapidly they produce a shorter wave of consciousness. The feelings they excite are thus less capable of analysis than are the feelings excited by the longer waves of the more slowly moving sensory currents. They transform the content of thought, however, by changing the passive states of sensation into tendencies. Associations of ideas, instincts and emotions could not arise out of mere perceptions if motor feelings did not accompany the feelings of sensation.

I shall assume these differences between sensory and motor currents and the consequences that flow from them without further analysis. I wish merely to present a working hypothesis and shall seek to verify my assumptions by showing how completely they harmonize with the observed phenomena of consciousness.

§ 4. The Self-Conscious Centre.

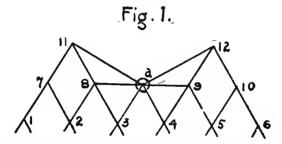
The clearness and vividness of sensory feelings are due to the mental mechanism by which they are reinforced and prolonged. After a sensory current is started at the surface of the body it is reflected from centre to centre, and becomes weaker and purer at each reproduction. The sensations in the higher centres are intensified when two or more currents reach it from the surface of the body at the same time, but by different routes. If these currents blend they create one wave of consciousness. The clearness of the resulting consciousness depends upon the purity of the wave, and this purity in turn depends upon the number of centres through which the current has passed.

The wave of consciousness is prolonged when the currents blending at a centre traverse routes of unequal length. If one current passes through four and another through five centres, the latter will arrive a little later, and thus sustain the wave a moment longer than if both currents arrived at the same time. There is a loss of intensity of consciousness in this case, but the greater length of the wave allows a better analysis of the content of the passing When several currents follow one another so closely as to blend into one wave and thus to sustain the consciousness of the centre, the beginning of the wave is more obscure and vivid than the end, because the currents first to arrive travel the more direct routes. This part of the wave contains the impression and strikes the mind with enough force to attract the attention from the receding currents which went before it. The purer part of the wave following so closely as to blend with it has traveled by a more indirect route and is usually reflected from some higher centre.

If the waves of consciousness follow one another so rapidly that a new wave arrives before the final portion of its predecessor has disappeared, a continuous state of consciousness is sustained. Centres which are so situated that only

a part of the currents started in a network of centres reach them, have intermittent states of consciousness. It is only in a very few favored centres—perhaps only at a single centre—that the surrounding mechanism is so complete as to create a continuous state of consciousness.

It will perhaps aid the reader to understand the mechanism of the mind if I illustrate the network of centres I have described by the aid of a diagram. These centres are arrayed in a purely ideal manner without any desire to reproduce the arrangement of a real mind.



In this diagram the dots represent the centres of an ideal mind, and the lines represent the nerves along which the sensory currents are carried. The lower portion of the lines represent the extremities of the nerves near the surface of the body. The nerve currents are supposed to start at the lower ends of these lines and pass upward to the first series of centres which are thus excited to activity. Reflected or secondary currents start from these centres and move along the upward lines to the next series of centres and arouse them to activity. The third series of centres are next aroused and then all the currents converge at a, the self-conscious centre.

According to the plan of the diagram when the adjacent surface receives an impression, six currents blend at a to create a state of consciousness. They come in pairs, and thus intensify or heighten the wave. Those from centres 3 and

4 arrive first and are the most obscure (as to content) and vivid; then currents from centres 2 and 5 come through centres 8 and 9, and finally the currents from centres 1 and 6 come through centres 11 and 12, conveying the purest but least vivid part of the wave of consciousness. Through this mechanism consciousness is prolonged and analysis of its contents made possible.

I have tried in this crude way to represent how some of the mental states are formed, if my hypothesis is correct. The ordinary mental states of men are much more complex than these, but they contain no more elements. Increased complexity or other forms of the mental mechanism blend the sensory and motor currents in a thousand ways and create that variety of thought and feeling with which we are familiar. The more prominent of these demand further analysis and to them we must now turn our attention.

§ 5. The Development of the Sensory Feelings.

If it may be taken for granted that pleasures and pains are motor feelings, it is less difficult to determine the order of the development of the sensory feelings. The sensory currents have a much lower tension than the motor currents and their peculiarities cannot become objects of perception until the motor currents have their own avenues of exit. Then each sensory centre becomes a place where certain sensations are perceived, and these sensations are reflected to other centres where they are aggregated in fixed ways according to the nature of the mental mechanism of the organism. The obscure but vivid sensations become impressions while the clearer but weaker sensations become ideas in the centres to which they are reflected. The process of reflecting sensations from centre to centre creates the difference between impressions and clear ideas. centres where they are felt the clear ideas are just as real as are the impressions of the lower centres. The thinker is not conscious of the refining process that has taken place before the clear idea becomes an object of perception in the self-conscious centre. All ideas undergo to some extent this process of refinement, and hence impressions and clear ideas differ not in kind but only in quality. To the thinker they both seem original elements of thought differing merely in clearness and vividness.

To explain the different kinds of sensory feelings produced by the mental mechanism, the distinction between centres with intermittent and with constant states of consciousness must be emphasized. If the states of consciousness follow one another so rapidly that a centre is constantly active it becomes a self-conscious centre. Few centres. however, are so advantageously situated as to receive all or even the greater part of the nervous currents that originate in the various parts of the nervous system. While the attention is necessarily attracted to the self-conscious centre, it is the other centres that really give a definite form to thought. These centres are aroused to activity only by particular nervous currents, and when aroused, the reflected currents which proceed from them have a definite character and produce given sensations in the centres to which they are reflected. The self-conscious centre receives the same sensation every time a given centre with intermittent states of consciousness is aroused to activity. Memory, imagination, forms of thought and ideals are not the products of the self-conscious centre which perceives them. They are the product of centres with intermittent states of consciousness united through the mental mechanism with the seifconscious centre. The products of the other centres are thus reflected to the self-conscious centre, and are thought by it to come from the outer world. Consciousness would be a medley of confused sensations, but for this aid from the mental mechanism. No one centre can at the same time receive all classes of sensations and so co-ordinate them that intelligent thought results. The self-conscious centre, capable of receiving all kinds of sensations must, therefore,

be cut off from direct contact with the outer world and receive its sensations indirectly from centres capable of receiving only sensations of particular kinds.

Of these complex sensations reflected from centres with intermittent states of consciousness two-forms of thought and ideals demand special attention. If an intermittent centre is far away from the original source of sensation and receives only ideas purified by repeated reflections, its states of consciousness contain a definite group of clear ideas and these ideas are always reflected in a body to the self-conscious centre. The intermittent centre is so connected with the lower centres that when the sensations it receives contain one of its ideas it is aroused to activity, and all its ideas are reflected to the self-conscious centre. Thought at the latter centre receives in this way a definite Certain of its clear ideas are always perceived in groups, and any sensations from lower centres containing one of these ideas have immediately added to them the other ideas of the group in question through the activity of some intermittent centre. The concrete phenomena of consciousness come from two sources. One element comes from the lower centres in direct contact with the outer world, and another element comes from certain intermittent centres which are aroused to activity by currents reflected from the lower centres. Concrete phenomena could not reproduce objective conditions so clearly but for the additions made to them by the higher centres which create forms of thought for the self-conscious centre. We could not conceive of an outer world with definite relations always existing between its parts but for this mental mechanism which forces all perceptions of objective phenomena into certain fixed moulds.

The way in which ideas of space and time are impressed upon all sensations coming from the outer world furnishes good examples of the action of centres creating forms of thought for the self-conscious centre. Our mental mechanism has been, I think, so developed that all the clear ideas of space are perceived at a centre with intermittent activity. This centre is aroused to activity by every sensation coming from the outer world, even though it contains but one of the elements which make up our ideas of space. This single element arrives at the self-conscious centre at the same time that all the clear ideas of space are reflected to it from the intermittent centre which creates the space forms. The two elements blend and seem to come as a unit from the outer world.

It has been assumed by Kant and other German thinkers that forms of thought are a part of the constitution of the thinking unit in the self-conscious centre. This assumption is, I think, erroneous. It overlooks the complexity of the mind and the aid to clear thinking obtained by the self-conscious centre from other centres with which it is joined by the mental mechanism. However real the original thinking unit may be, it has not all the powers which are ordinarily attributed to it. We must know the part which the mental mechanism plays in forming clear thoughts before the powers of this original unit can be determined.

Space and time are not the only forms of thoughts. There are also taste forms, musical forms and æsthetic forms, and doubtless many other kinds are more or less fully developed. Our idea of the taste of an object does not depend simply upon the sensations which contact with it arouses. If the taste of the eater is cultivated he adds to the sensations aroused by direct contact many indirect ones coming from intermittent centres of consciousness where taste sensations are perceived. The supposed taste is the joint product of these two elements. Some sensations of taste are aroused only by sensations of odor. Contact with an object fails to arouse these sensations but certain sensations of odor can arouse the centres having the taste forms, and these centres reflect to consciousness the proper sensations to supplement those directly received.

The difference between a musical and an unmusical person or between an æsthetic and unæsthetic person depends upon the development of musical and æsthetic forms of thought. The tones or colors perceived by undeveloped persons are more nearly like the original impressions than are those perceived by persons with more cultivated tastes. one hand the process of repeated reflection which the sensations undergo purifies the ideas of the cultivated person and shuts out the obscurer elements in the original impression. On the other hand certain forms of thought are impressed on the thinking centre so that the sensations it perceives have other elements than those the original impression contained. Order, beauty and harmony are thus secured to a far higher degree than would be possible if the mental mechanism for producing these sensations were more simple, and the original impressions were conveved to the selfconscious centre in a more direct manner.

Other centres reflect to the self-conscious centre definite groups of ideas and are the source of our ideals. Ideals are like forms of thought in that they are groups of clear ideas generated in the higher centres. These ideas have become purified through repeated reflection. In many respects, however, ideals resemble memories because they contain ideas grouped in a definite way. These ideas are so blended that they seem almost as concrete as do memories. Memories might be compared to an original chemical compound partly analyzed into its parts. Ideals are like a number of isolated elements partly combined so as to seem a unit. Their number and their definite relations give them an air of concrete reality.

When these ideal-producing centres are aroused they add to the object arousing them a number of qualities which it does not and can not have in the present environment of the individual perceiving them. Ideals are mainly social, and need a unit of the social world to arouse them. They create another environment for this unit, or add qualities

which the unit could have only in another environment. In this way the mental mechanism gives to the thinker certain other environments to contrast with the present one or adds new qualities to many of the persons or objects he sees or hears of.

Heaven and purgatory, for example, are definite groups of clear ideas reflected to the self-conscious centre from a centre of intermittent activity. A thought or object which arouses one of these centres has added to it the whole series of ideas possessed by the centre, and the whole series is impressed with such vividness and concreteness as to seem to be a part of the real world. It becomes so nearly akin to a memory that it has a like effect upon the actions and conduct of the thinker. His character is as much modified by these ideas as though they were facts of experience.

In the same way future welfare, home and the family become ideals, adding elements to present experience and forcing it into given forms that it could not take but for the fact that these groups of ideas are impressed upon the self-conscious centre every time that one of their elements comes to the consciousness from external sensations. home of an individual is much more than the actual contents of the dwelling house and the real persons that dwell there. The possessor of a home cannot see its contents or its intimates in the same light as an outsider. He is forced to add elements that are impressed upon his consciousness by his mental mechanism. The lover cannot look on the object of his affection as other persons do and see her true To those impressions conveyed by the senses, he adds all the qualities possessed by his ideal woman. The two elements blend so completely that he sees in her all the qualities of his ideal.

Hero worship is due to the same causes. The qualities of an ideal hero are impressed so vividly upon the self-conscious centre that the defects of the real hero are overlooked and other qualities added which he does not possess.

It is impossible to get the hero worshiper to see the hero in his true character, because his mental mechanism transforms the hero into a being other than that which he really is. The king, the saint, the general, the nobility, and other persons become invested with a peculiar sanctity as soon as they become ideals to their followers. The evidence of the senses is no longer the criterion by which their virtues and defects are determined. A subjective element blends with the objective reality, giving the adored person a peculiar halo which isolates him from ordinary mortals.

These facts show that ideals, like forms of thought, are due to the constructive activity of the mental mechanism. They are means of enriching the experience of individuals and of giving to their thoughts a definite form, which an isolated thought centre could not acquire. A mere association of ideas could not arrive at such results. It might join ideas in groups but it could not give them that objectivity which belongs to forms of thought and ideals.

§ 6. A Classification of the Motor Feelings.

If there were no mental mechanism there could be no motor feelings. There could then be but one thought centre. and all the nervous currents leading to it would be sensory currents. The motor currents which start in this centre would proceed directly to the surface of the body without becoming objects of consciousness. It is only when a complex mental mechanism is developed that the motor currents of one thought centre can pass to other centres instead of going directly to the muscles. In this case peculiar motor feelings arise in the centre to which the motor current goes which must be contrasted with the sensory feelings coming from the surface of the body. The motor currents, if my analysis of them is correct, move more rapidly than do the sensory currents and have a higher tension. They are less capable of analysis because they pass through the selfconscious centre so quickly. For this reason, however, they have more force and a greater power to direct the attention of the self-conscious centre to themselves.

There is no mechanism to reproduce motor feelings or to strengthen or contrast them as there is in the case of sensory feelings. There are, I think, no motor memories, forms of thought, or ideals: these mechanical contrivances belong to the sensory system. If motor feelings have any influence on the content of consciousness after they pass from consciousness, it is because they have some indirect effect on the sensory ideals or forms of thought. memories of a pleasure or a pain are possible only through the bodily attitudes which accompany the pleasure or pain. If we imagine ourselves in the same position as that in which we enjoyed a pleasure or suffered a pain, a new feeling of a like kind is aroused. The old feeling is gone forever and cannot be revived by the memory alone. faculty can merely revive the sensory impressions which accompany motor feelings, but can never restore the latter except by creating new tendencies to activity.

Beliefs, like other motor feelings, are not by themselves objects of memory. The definite relations in which the ideas stand that produce the beliefs are objects of memory, but a belief once gone from consciousness is never revived. The same relation of ideas may produce the state of belief anew, but it is this new state of which we are conscious and not a memory of an old belief.

This lack of a mechanism to revive beliefs as ideas are revived gives to our thinking many of its peculiarities. We recollect the definite relations in which ideas stood to one another at a given time, but not the bond which held them together. We are apt, therefore, to confuse our memory of facts and relations with the actual content of consciousness when they were perceived, and to assert that there was no more in the consciousness than there is in our memory of our states of consciousness. When Hume asserted that there were no bonds between ideas existing in

a causal relation, he had in mind our memories of the states of consciousness rather than the states of consciousness themselves. These memories retain only the sensory elements of consciousness, and hence lack the motor elements, the forces by which a belief in causal relations is created.

If the motor feelings have no mechanism by which they can be revived their classification is more simple than if such a mechanism existed. The only differences in them are due to the differences in the centres from which they come to the self-conscious centre. The passions are the effects of the currents from lower motor centres. They are indefinite promptings to actions which are aroused by the mere presence of some object by which the lower centres are excited to activity. The beliefs are due to the motor currents arising in the higher centres from which the ideas are reflected to the self-conscious centre. When two ideas exist in the mind in a given relation, we have a belief in the reality of this relation if at the same time a motor current creates a motor feeling to bind them together.

This classification of the motor feelings corresponds very closely to Hume's classification of the contents of the mind. The two plans have the same thought as their basis. Hume thinks ideas differ only in the force and liveliness with which they strike the mind. The motor feelings having no mental mechanism to aid their retention or reproduction can differ only in this way. They blend with or displace one another and do not furnish those definite contrasts which the sensory feelings with their complicated mechanism can furnish. It was easy, therefore, for Hume and others to overlook them or to assume that they were merely obscure parts of the sensory feelings not worthy of analysis.

§ 7. The Defects in the Reasoning of Locke and Hume about the Powers of the Mind.

The Association school of psychologists, of which Locke and Hume were the leading representatives, gave to the world a consistent theory of the powers of the mind. As the principles of this school are accepted by most writers on social topics, it is necessary to contrast my picture of mental activity with that of this group of thinkers and to point out what appear to me to be defects in their mode of reasoning. I agree with them in thinking that the mind has not the power to originate ideas without the aid of sense perceptions, and that the purest and best thoughts and ideals of men are but complex forms of a few simple ideas which by themselves are insignificant and perhaps unworthy of attention. The defects in their conclusions are not the fault of their analytical mode of reasoning, but of their erroneous concept of the mechanism of the mind.

It is assumed by the earlier writers of this school and clearly stated by the later writers that the nervous system conveys directly from the outer world to the self-conscious centre the impressions which the outer world makes on the nervous system. All the elaboration of these impressions takes place within the self-conscious centre under the eye of consciousness. Consciousness, therefore, is the judge of all mental processes beyond the creation of simple impressions. When the consciousness arranges its ideas for inspection it finds that they differ from the original impressions only in vividness and clearness. All ideas are copies of impressions, and any idea of which an original impression cannot be found within the field of consciousness is ruled out as fictitious.

Such is the reasoning of Hume. Locke has the same mental picture, but his attention is attracted to another phase of the problem. He decides that there can be no innate ideas because the consciousness has no power to originate ideas. This doctrine, correct in itself, is misapplied by Locke, for he attempts by its aid to discredit all ideas which do not have sense impressions going with them.

Practically Locke and Hume were both right, for they were resisting the attempts of certain theorists to make innate-

the prominent race ideals, and thus to avoid a critical examination of these ideals and their influences. They were right in insisting that great things must come out of small elements, but they were wrong in assuming that these small elements could enter the mind only by one road—the sensory nerves, which come directly from the outer world.

Change the picture of the mental mechanism and the falsity of such assumptions becomes apparent. If sensations can come indirectly from other thought centres as well as directly from the outer world, we can no longer assume that the ideas received at a given centre are mere copies of the impressions received directly from the outer world. We can still say that there are no innate ideas or principles belonging to the thinking unit because of its construction, but we cannot say that the mechanism of the mind does not impress on the self-conscious centre ideas which were not a part of a given impression when it became an object of consciousness. All ideas may still be started by currents from the outer world, but a part of this original current is so changed in its journey through the other centres that it gives to the self-conscious centre ideas which the original current could not arouse.

So long as Locke makes war on the innate character of the great race ideals he is on safe ground, but when he applies his principle to more humble phenomena his errors become apparent. He thinks he shows the absurdity of the innate character of these ideals by showing that the same reasoning would prove sweetness, bitterness and like qualities to be innate and not the result of impressions received directly from the outer world. There is, however, no nervous current started by contact of the tongue with sugar that if conveved in an unmodified form to the self-conscious centre would arouse the sensation of sweetness. Taste, color. sound, and other simple sensations are as much the product of a complex mental mechanism as are the highest race ideals. Clear definite impressions are always obtained by adding elements that are not in the original nervous current which produces the impression. When the mechanism of the clear vivid sensations of taste, color and sound are explained, no new forms of mental mechanism are needed to create the highest race ideals.

The errors of the opponents of Locke lay in the attempt to give to certain race ideals a basis different from that of the more common ideas derived from material objects in the outer They wished to invent a special faculty, whose business was to perceive the great race ideas and certain important principles and thus to give to them an objectivity and truth which the ordinary mental processes could not give them. It was assumed that reason was a special faculty for the production of these ideals and principles, and that by the aid of this faculty the thinker was put into a position where he could see the truth and objectivity of these ideals and principles without the need of the tests towhich the more common ideas and maxims were subjected. Locke was right in denying this claim and in subjecting these higher products of thought to the same tests that are applied to other kinds of knowledge. They are not different in kind or in origin from the simpler ideas of every-day life and need no special faculty for their production. however, contain elements not given by the impressions coming directly from the outer world, and in this respect they do not differ from other kinds of knowledge.

All clear concepts have elements which are added to the original impression by the mental mechanism after the original nervous current has arrived at the self-conscious centre. These original currents are always so obscure that they could not impress clear and definite ideas on the thinking centre but for the secondary currents which come from other centres. Elements, therefore, can be added to the original impressions and such elements must always be added to make the thought clear and vivid to the thinker. It is wrong, however, from this clearness and vividness of

ideas to infer that they have an existence and reality outside of the mind. Such propositions need other proof than is involved in their perception, and Locke and Hume were right in objecting to the proof given by their advocates for the existence of a special faculty for perceiving them.

§ 8. The Mechanism of Belief.

Of the school of thinkers to which he belonged Hume gave the clearest analysis of the causes of belief. I shall turn. therefore, to his writings to secure a starting point in the present discussion. His thesis is primarily that belief is not due to intuition or to reasoning. His predecessors had sought to find the source of belief largely, if not solely, in the intellectual processes, of which reasoning is the best example. It was supposed that when certain propositions were placed in a given order a feeling of belief arose out of the relations perceived between the various ideas contained in the propositions. Hume denied that this was the origin of belief and claimed that it was due to the way in which the ideas of a given proposition were conceived. Ideas differ from impressions only in the degree of their vivid-A belief is, therefore, "a lively idea related to or associated with a present impression." The only way to create a belief in a proposition is to give greater vividness to the ideas it contains. "The belief," he said, "super-adds nothing to the idea, but only changes our manner of conceiving it and renders it more strong and lively." On its negative side I believe Hume's argument to be sound. His predecessors and opponents gave to the reasoning process a power of creating belief, when it would have been nearer right to have affirmed that its function was to destroy belief. I shall describe the function of reasoning in a later section, but at present it is enough to say that these opponents gave no valid proof that the process of reasoning is the source of belief, and that Hume had an

easy task to overthrow their theory and to replace it with a new one having an inductive basis.

Hume's theory that belief is only a lively idea is based on the assumption that the contents of the mind are limited to impressions and ideas, the latter differing from the former only in the fact that they strike the mind with less force and vivacity. I have already pointed out objections to this doctrine that the contents of the mind consist only of impressions and their less vivid copies in the form of ideas. It assumes that the mind receives no impressions except those that come over the sensory nerves. These sensory feelings differ only in vividness. If they make up the whole contents of the mind, ideas can only be copied impressions, and beliefs are only these weakened ideas made so strong that they again resemble impressions and may be mistaken for them. A more complicated mechanism of the mind than that conceived by Hume would make room for more possibilities, and suggest some other source of belief. If we have motor feelings as well as sensory feelings, beliefs may belong to the class of feelings which Hume overlooked and may not, therefore, be merely one form of conceiving an idea. In conformity with my hypothesis of mental activity I shall assume that belief is the product of motor feelings that accompany the activity of the higher thought centres in which clear ideas, forms of thought, and ideals are created. When these centres start nervous currents which reproduce their ideas and forms of thought in the self-conscious centre. motor currents are started also in these centres which tend to create activity in the body. These motor currents are reflected to the self-conscious centre. They arrive at the same time and form a part of the same wave of consciousness which produces the sensory ideas. As the sensory and motor currents blend it is easy to mistake the impression created by the motor current for a modification of the sensory A belief, however, is not the same as a vivid Ideas about which we have no belief may be as vivid idea.

as those about which we have a belief. A thorough belief in the existence of Paris may exist along with a dim impression of it, while a vivid impression of how it would look in flames may be accompanied with no belief that it is on fire. Belief is something more than the vividness and force of ideas and demands some other explanation.

I should say that belief is primarily an unimpeded tendency to activity. The centres creating the ideas for the self-conscious centre start motor currents at the same time that they start sensory currents. If these motor currents are not obstructed before they are reflected to the self-conscious centre, they create the feeling of belief. If they are obstructed before reaching this centre, the sensory currents present ideas about which there is no belief. If they arrive at the centre, but are met in it by opposing currents, a state of arrest follows accompanied by a feeling of conflict and sus-Viewing belief in another way we may say that it is an unimpeded tendency to objectify thought. When a sensory feeling is accompanied by a motor feeling we think of the object of thought as apart from or outside of ourselves. Objectivity is not a kind of vividness of ideas but is a new feeling due to our tendencies toward activity. If we were never active nor a cause of bodily motion, we would have no concept of the objectivity of our ideas and thoughts. The motor currents in some way create the state of mind in which we objectify our thoughts and there is no simpler way of producing this effect than that which I have described.

§ 9. A Restatement.

Before closing this preliminary discussion it seems best to restate some of its leading ideas. My main object is to discuss the origin of the social forces. But to do this properly it was necessary to explain the psychologic basis upon which these forces rest. Were psychology a perfect science this would have been an easy task; but the defects in psychology are only too clearly shown in the light of the social sciences.

It was necessary, therefore, first of all to present an hypothesis of mental activity that would emphasize the basis on which the social forces rest.

The defects in current psychology are traceable to the fact that analytic psychology has not kept pace with the development of physiologic psychology. We now know how complex the mind is on its physical side, that there are numerous centres reacting on each other, and that many of them have no connection with the outer world except through the activity of related centres. We know too that the sensory and motor nerves and centres have distinct mechanisms, and that they react on one another in various In the analysis of the content of consciousness. however, we have not changed our concept of mental activity since the time of Locke and Hume. We proceed as if the mind were a unicellular organism directly connected with the outer world by a few sensory and motor nerves which do not react on one another in any way. It is assumed that the unity of sensory feelings is created within the field of consciousness itself by a process of association of ideas. There are in this scheme no motor feelings because the motor nerves pass directly to the outer world, and we are conscious of their effects only through the return of certain sensory currents started by the changes in the outer world caused by the motor currents.

A new analytic psychology should assume a greater complexity of the mental mechanism than the old psychology admitted and investigate whether the feelings of which we are conscious have not a greater variety of causes than were assumed by the old psychology. There should be an inductive study of the field of consciousness and a new classification of its contents. Only in this way can we determine whether or not the ideas of the mind are of as many kinds as our present knowledge of the physical basis of the mind would permit.

Let me give, therefore, in outline, the kinds of feelings

which a complex mental mechanism with many centres would make possible. There could be both sensory and motor feelings. If motor feelings are felt it is probable that pleasures, pains and beliefs are due to them. These feelings lack that concreteness and objectivity which are so characteristic of sensory feeling. They lack also a definite mechanism for their reproduction in memory. The best test of sensory feelings is our power to remember them; while these feelings that I assume to be motor only appear in memory by their effects on the outer world, which are conveyed to consciousness over the sensory nerves.

The mechanism which produces motor feelings is doubtless the older portion of the mind. Low forms of life depend upon pleasures, pains and instinctive motor feelings to guide actions. The sensory feelings were not yet differentiated, and some low form of touch may have given them their only ideas about the outer world. There was probably a time when the mechanism of the motor feelings was as much more developed than that of the sensory feelings as the latter mechanism is now in human beings ahead of the former.

The pursuit of pleasure was, I think, the controlling force which led to the development of the motor system. The development of the sensory system, however, depended upon the need of avoiding the sources of pain. To accomplish this end the sensory nerves had to convey more definite impressions from the outer world, and the resulting ideas had to be better co-ordinated and more firmly associated. memory of past events was one of the best means for this end, and when the sensory mechanism had developed up to this point it became of more importance as a requisite for survival than the motor mechanism. But little further change was made in the motor feelings. The new sensory mechanism became the source of mental progress through that long period in which the avoidance of pain was the first thought of every creature. At length the sensory mechanism has become so important that in human beings the motor

feelings lose their distinguishing characteristics and are regarded as mere modifications of the sensory feelings.

The relative development of sensory and motor systems depends upon the environment of the organism. If a creature is in direct contact with a physical environment or is the master of all the creatures in this environment, its progress depends upon the development of its pleasures, and this in turn on the development of its motor system. If, however, this creature becomes the prey of other creatures it is transferred from a pleasure to a pain environment. Survival now depends on its power to avoid pains and this end is best secured by a development of the sensory nerves through which it becomes aware of the presence of enemies and of the avenues of escape. The wider the range of its perceptions, the better its memory, and the firmer the association of its ideas, the securer will be its position.

Human societies have at length emerged from the condition where the avoidance of pain is the requisite for survival. Man is now placed in a pleasure world and his needs demand a pleasure and not a pain economy. There must, therefore, be more attention paid to the motor feelings upon which success depends in such a world. The psychology of Locke and Hume reflects the condition of the old pain economy and emphasizes the importance of the sensory mechanism. Impressions, ideas and the laws of their association form the sole topics of their investigations. forms of thought, and ideals are overlooked or ignored. This neglect is of especial importance to students of social affairs because the social forces have their origin in these complex forms of thought. They must free psychology from these defects and errors before a sound basis for reasoning in the social sciences can be secured. The preceding sections of this essay have endeavored to describe the foundation on which social phenomena rest. The following sections will try to trace the effects of these psychologic premises in some of the leading departments of social science.

CHAPTER III.

KNOWLEDGE AND BELIEF.

§ 1. Local and General Environments.

In order to trace the development of the social forces from their beginnings we must describe in greater detail the physical peculiarities of the earth's crust upon which the objective environments of different individuals or societies depend. These problems have been neglected because the study of organic life has so largely absorbed the attention of biologists. It is assumed that a few general conditions make up the environment and that their influence is so constant a factor that in the study of evolution they may be overlooked without danger of error. When we throw aside these presuppositions and look at the problem without prejudice, it is clear that we must study the diverse conditions which form environments. If organisms develop it is not owing to internal conditions or to the laws of life, but to some peculiarities of the surrounding conditions.

It is a well-known fact that the goods upon which animals subsist are very unequally distributed over the surface of the earth. The great geologic changes have produced mountains and valleys, deserts and fertile plains. The direction of the sun's rays and the location of oceans and mountains determine the climate, temperature, and rain-fall. Many local conditions contribute to heighten the irregularities due to these general forces and thus to give to certain localities great advantages in food and climate over other less favored regions. Each favored locality has some articles of food or conditions of life in which it is superior to all other localities, and animals fitted for such a region find in this locality the best opportunities to live and thrive.

When animals in the process of development change from one environment to another, the requisite for survival in this new environment is found in its best form in these favored localities. The tendency to occupy these favored regions, and to struggle for their possession is strong. This struggle leads to the development of the conquering organisms, both in function and in desire, and they acquire better bodies and more intense desires for food and activity.

When economic conditions force a given species to struggle for the possession of a few favored localities. their environment is a local environment, because it depends so fully upon the peculiar combinations of certain economic conditions in this region. Objective conditions in this case are the cause of progress, and but little depends upon the choice of the individuals undergoing the evolution. matters little what the economic instincts of such creatures are while their goods are furnished free by the environment. Their power to survive depends solely on the intensity of their desire for these free goods and upon their physical power to monopolize a part of the region for their exclusive use. Under such conditions aggressive instincts which put a being in a state of opposition to his fellow creatures, are of more value to him than economic instincts which cause him to utilize more completely or to improve the conditions of his environment. Greater bodily activity and an increase in ability to experience pleasure go hand in hand, and give to beings most developed in these respects a power to survive in the favored localities where the economic goods are free and do not, therefore, demand conscious attention.

When the motor powers of animals are fully developed, the requisites for survival are to be found, not on the motor side of mental activity, but on the sensory side. The memory is developed; the power to analyze objective phenomena into their material elements increases; images and ideas of absent conditions are formed; and beliefs are generated which determine the mental attitude of beings toward unseen objects. Direct activities depend on the development of the

motor powers, indirect activities depend on the development of the sensory powers. When periods of time can be contrasted and mental pictures of absent objects become so vivid as to modify conduct, economic activities begin, and the aggressive instincts of individuals are directed to the subjugation of the common environment instead of against other individuals. A new tendency shows itself to enlarge the area from which sustenance is drawn, and to depend less on the local environment where the objective conditions are so complete that each individual is independent.

The development of the sensory powers gives to a being a knowledge of the conditions of a larger area and creates a tendency in him to seek for an adjustment to a wider range of objective conditions. Less dependence is put on the free goods of favored localities and the activities are now exercised in bringing into harmony the many conditions of the enlarged environment. In this new environment no single element may be as good as the leading elements of the old environment, but a proper combination of several poorer elements yields to the individual a fuller life and greater activity than the fewer elements of the old environment.

This tendency to make life depend upon a greater number of conditions, although these conditions may be less complete than the fewer conditions of the local environment, lies at the basis of the movement of beings from favored localities to a more general environment. With each addition to the sensory powers this general environment can be enlarged and life can be made to depend on more complex conditions. An isolated individual is not able to utilize this enlarged environment. He must be supported by other beings. Indirect activities must also displace the direct activities of lower beings. This co-operation of beings and the change in the direction of their activities depend upon the growth of social feelings. The aggressive instincts must be checked or turned into new channels. Habits,

customs, and modes of thought must be acquired which will enable individuals to live in peace with one another and to get pleasure out of one another's society. All these changes depend on the development of the sensory powers, and show the marked contrast which exists between beings in whom the sensory powers are developed and those in whom the motor powers are still dominant.

There are thus two stages of progress—the biologic and the social—corresponding to the two possible environments. In the biologic stage beings are pushed into a local environment where the objective conditions are so complete that little thought is needed to supply the necessities of life. Under these conditions the development of the motor powers determines who shall survive. The organism becomes a more nearly perfect individual because of the growth of organs on the one hand and an increase of desire on the other. struggle for such an environment the beings with the superior motor powers drive out those with inferior motor powers. Some of the latter class are, however, better fitted to occupy a general environment where their sensory powers are of more use than in the local environment from which they were driven. The conquered thus find a place to live and by the development of some of the social forces create for themselves a new society with new requisites for sur-When the struggle for existence begins within this new environment, those with superior motor powers will again survive, while those with an imperfect motor organization, but with improved sensory powers, will be forced again into a more general environment where new social instincts must be acquired.

The social beings with superior sensory powers are thus repeatedly defeated and driven out by those whose motor development is superior. Social progress can continue so long as there is a more extended environment in which highly developed sensory beings can find refuge. Biologic progress is due to the struggle for existence within a given

environment. Social progress is due to the necessity of breaking over from one environment to another. The one tends to create a local environment in favored localities, the other tends to create a general environment in which more of the economic forces are utilized. The two stages of progress supplement each other and together make up the process of evolution.

§ 2. The Subjective Environment.

In the preceding section the growth of social forces was shown to depend upon objective facts, but no attempt was made to point out the psychologic causes which lead to this growth. Corresponding to objective conditions favoring the growth of social forces, there must be certain subjective conditions upon which it depends. The key to these changes lies in the development of the mental mechanism. The sensory nerves bring to the self-conscious centre not merely the coarse products of external impressions, but also the refined products of related centres. Each of these centres adds certain elements to the external impressions which arouse the centre to activity, and these are reflected to the self-conscious centre and there blend with the impressions coming from the outer world.

The self-conscious centre does not see the external world as it is, but as modified by the activity of related centres. Before a being with highly developed sensory powers has time to act, its concept of its environment is changed by additions from these related centres. Its whole environment is made up of two parts—the objective environment presented through the original impressions, and the subjective environment created by the activity of related centres. Each impression from the outer world has added to it certain ideas from the subjective environment and the joint product is projected by the mind and seems a part of the objective world. Customs, habits, social institutions and ideals are as as objective and real to individuals as any part of the outer world.

The mechanism by which these results are accomplished is the result of the development of the sensory feelings. Forms of thought and ideals are created for the social world on the same plan that they are created for the physical A single idea of any related group arouses to activity some centre fitted for its reception and then the whole group of ideas is reflected to the self-conscious centre and so blended with the first impression that they all seem to have come from the outer world. I call these ideas, forms of thought, and ideals an environment because they determine the action of individuals in the same manner that the objective environment does. The meaning of an environment is that it limits and directs activity in certain fixed In a local environment nearly all the choices of channels. individuals are determined by the nature of the physical conditions of the locality. There is a certain kind of food. a certain kind of shelter, a given climate requiring certain decisions to ward off its evils or to profit by its points of superiority; the enemies are of a given class, and to avoid or to conquer them another series of activities arise and become fixed. In almost every decision some physical condition is faced which can be surmounted only by a fixed series of acts.

When an animal moves out of a local environment into a more general environment fewer of its acts are determined by physical conditions. The choices of the animal would be arbitrary if some new conditions were not created to supplement the effect of the physical environment. Uncertainty and confusion would result and no group of animals could act together under such conditions. Yet co-operation is a necessity for beings who would occupy a general environment; without it no social progress would be possible.

To remove this uncertainty and confusion a subjective environment is created by the activity of the sensory centres. Whenever, in a general environment, an objective condition which determined the choice in a local environment is removed, some idea, form of thought, or ideal is created by the mental mechanism. New conditions thus arise which make the actions of the individual as definite and certain as before. Each individual projects and visualizes the same subjective environment. The whole group act together and their choices can be depended upon as fully as though the surrounding conditions were all physical.

The subjective and objective environments thus supplement each other and are so blended by the mechanism of the mind that individuals cannot separate them in thought without great effort. Each series of choices leading to a given end has its parts presented in the proper order. Each choice is fixed by the mental picture which the subjective environment presents at that moment. When indirect activities become possible, the means by which ends are secured must be pictured in the subjective environment as definitely as the road which a person is to travel is pictured by the evesight. Instead of seizing an opponent with the teeth or claws, as direct activity would demand, the picture of a club, axe, spear, pistol or some other weapon is presented, and the choice is determined by this picture and not by more direct promptings of passion. In this way the picturing activity of related centres modifies the choices at the selfconscious centre and creates harmony of action among the members of a social group.

The movement of a society to a more general environment lessens the dependence of its members upon the conditions of the objective environment and increases their dependence upon the conditions of the subjective environment. The requisites for survival gradually become subjective and progress depends more and more on the development of the sensory powers.

§ 3. The Extension of Knowledge.

It has been shown that mental progress depends upon a series of requisites for survival which must be surmounted

if evolution is to be progressive. Each of these requisites for survival forces an abrupt change in the activities and interests of the beings undergoing the evolution. habits, beliefs and ideals needed for the new environment are of such supreme importance that they must be acquired in the easiest way and in the shortest time. Knowledge acquired in the old environment is likely to be misleading under the new conditions and tends to strengthen the habits and beliefs fitted for it. When slight changes are to be made, knowledge acquired in the past, and reasoning based on it, are the safest guides to success. But when great changes must be made with great rapidity, the person who sets aside his acquired knowledge and modes of reasoning and guides his activities solely by the new experience, will surpass his more conservative competitors in the rapidity of his adjustment to the new conditions.

There must, therefore, with such requisites for survival, be a return to the primitive method of evolution. The organism must act on dimly seen facts and beliefs so imperfect as to be merely semi-conscious impulses. Clear knowledge and strong beliefs can only come at a later stage when an adjustment has already been made to the more elementary of the new conditions, and even then they are due to the experience acquired in the new conditions and are in no way dependent on the knowledge and beliefs of the earlier epochs of progress. Instead of any such dependence there is usually an opposition between the old knowledge and beliefs and the new, which must in some way become adjusted by a revision of the older ideas and beliefs.

If a being guided by the sense of touch should secure the conditions favorable to the perception of light, a new sense would develop and a new area of knowledge would be opened up, with which would come new feelings and beliefs. The sensory feelings upon which this knowledge is based would at first be very vague, yet these vague feelings would have to be chosen as a basis of action instead of the more definite.

sensations of touch. The new beliefs and impulses of the sight area could not be derived from the beliefs and impulses of the touch area. It would be the necessities of the new situation that forced the new beliefs, and not any process of carrying the results of the older area of knowledge into the new area.

The first area of knowledge depends upon the sense of touch. When an organism comes in contact with other objects this sense will tell something of their qualities, and thus enable the organism to avoid some of the disagreeable elements of its environment and to assimilate others upon which life depends. Such knowledge must be meagre, leaving the organism without any means of knowing of objects or places with which it is not in contact.

A new area of knowledge is acquired when the sense of touch is supplemented by the power to recognize the differences in certain vibrations of the medium by which the organism is surrounded. Light, sound and smell are alike in that they are due, not to contact with external objects, but to vibrations in the medium which surrounds both the organism and the external objects in which it has an interest. In their primary form these vibrations are a warning of the presence of moving beings. The inference is that there is a movement for each vibration which the organism perceives. A knowledge of a moving object can thus be acquired before the being comes in contact with it. As these vibrations precede the feeling of touch, the two facts are related, and an expectation of the feeling of touch follows the perception of these vibrations. This knowledge is of immense importance to beings whose environment is largely determined by hostile organisms. To such creatures moving objects are usually sources of pain, and a warning of their approach gives an opportunity for escape. The perception of these vibrations thus becomes a requisite for survival. Fear is the first sensation which a perception of these vibrations creates. Moving objects, fear and pain, become a definite series of associations and throughthem knowledge is greatly extended.

For these reasons the concept of beings in the external world precedes that of passive material objects. Animateobjects are recognized through the vibrations which pro-Every object is regarded as animate ceed from them. which is the cause of vibrations in the common medium surrounding the observed and the observer. It is possible to recognize objects as inanimate only when the observer is able to see in them definite qualities apart from the substance in which they inhere. This power to perceive definite qualities in objects and to analyze these objects intotheir elements, demands a much higher development of the sensory powers than beings have in the early stages of progress. They must also be able to combine into a unit qualities derived from different senses. While the thought of a moving object can come through one of the senses, the passive characteristics of material objects must be tested by The observation of color, form, more than one sense. weight and other qualities of the inanimate world demands. from the observer a much greater development of the senses than does the mere observation of motion.

There is much historical evidence to show that primitive races think of the world as made up solely of animate objects. Each tree, plant or river is to them a living object, having the qualities of other animate beings. This tendency to view the world as a series of beings shows that a race is just emerging from a state in which objects were recognized only by the vibrations they created. As soon as sensory powers are sufficiently well developed to see and analyze the qualities of material objects, primitive man ceases to view the world as animate and begins to think in terms of qualities of objects and not in terms of undivided wholes. The more a race analyzes the objects about it, and the smaller the units into which it divides these objects, the more materialistic is its concept of the world. It cannot view the world in

a material way until it separates the motion of an object from the object itself. While the thought of a passive object stripped of its motion seems to us a simple concept, it is not acquired by beings until long after the time when they can recognize a moving object and unite to avoid it.

This extension of knowledge brings a being into what I call a pain economy. I mean by this that all the endeavors of the being are directed toward the avoidance of pain. All the requisites for survival depend upon the power to avoid enemies. The environment at this stage of progress is largely a living environment because the conditions for survival depend so largely upon each being's relations to other beings. There are few points of contact with the material world which are of importance in the struggle for life. Food at this stage of progress is not a requisite for survival. There is so much of it that it can be secured readily if enemies can be avoided. The conscious thought must, therefore, be directed toward the living beings in the environment. Greater power to avoid contact with other creatures is of more importance than greater power to secure food. Pleasure remains a subordinate force in determining action, while pain becomes the leading element and the cause of progress.

Another extension of knowledge comes when beings can analyze an object into its elements, and can recognize the difference between passive material and active beings. This change in attitude is due to a further development of the sensory powers. Vibrations take definite shape in the form of color, sound, smell, etc. Heat, light and motion are thought of as qualities and not as entities. Numerous other qualities are discovered, and the contrast of substance and quality becomes clear and definite. The attention is transferred from beings to matter. Even beings are analyzed into their material constituents and thus a new basis for the objective world is discovered in a few elements about which there was little or no interest. This change

of interest from beings to matter is accompanied by a change from a pain ecomony to a pleasure economy. With a living environment of enemies the avoidance of pain is the first requisite for survival. When these enemies have been for the moment eluded, pleasure and food may be secured, but the first interest is always in the enemy and the pain to be avoided.

The recognition of the world as an aggregate of materials shifts the interest from pains to pleasures. It is seen that these materials may be united in many new ways and thus protection may be secured from enemies and weapons formed for self defence. Mere material may also be reshaped into goods and thus be the source of greater pleasure. When the possibility of transforming materials into goods is once recognized, new avenues for activity are opened and an interest is acquired in a much larger region than before. Much of the material of which goods are made must come from distant places, and thus the act of production extends the field of knowledge so as to include the whole region from which comes the material used in making goods. Brazil, Cuba and China come within the scope of our sensory powers as soon as coffee, sugar and tea become parts of our food supply.

The connection between a material concept of the world and a pleasure economy has not been sufficiently emphasized. The growing interest in a life of pleasure has been the prime motive which has forced modern nations to adopt an analytical and material attitude concerning the composition of the external world. With each reduction in the attention necessary to avoid pains and enemies, men have become more conscious of the need of greater sources of pleasure. But more pleasure can come only from a greater power to separate the original masses into their elements and to reunite them in new ways. Pleasures come from material sources and a seeker for pleasure must attain his end by acquiring a material concept of nature. A

love of pleasure and a belief in the materiality of the world go hand in hand, just as a fear of pain is accompanied by a belief that the ultimate units of the world are animate beings. Each belief is an outcome of the environment in which the thinker lives, and of the relative development of his sensory powers. These are characteristic beliefs of beings having different areas of knowledge. Much of the confusion and contradiction in human beliefs is easily explained when it is recognized that mankind has but recently developed out of a pain into a pleasure economy.

When a material concept of the world has been acquired. another extension of knowledge becomes possible. distinction is now drawn between the natural and the supernatural worlds. In the natural world the material concepts of a pleasure economy are dominant, while the supernatural world is still conceived of as a world of beings, just as in the pain economy. The thought of higher and more powerful beings than those of a human society is thus acquired and distant worlds are peopled with such beings who are in more or less frequent contact with human society. These higher beings exert an influence upon human affairs by relieving pain and by restraining crime and violence. The weaker human beings seek for protection from enemies through the power of their superiors, and in this way it is hoped that the evils of a pain economy may be overcome. higher beings and in their power to influence human affairs is at the basis of this extension of knowledge.

So long as these beliefs remain there are definite ideals and forms of thought created by the mental mechanism, which modify all the original impressions coming from the outer world. The content of the self-conscious centre is thus enriched by certain ideas which become as much a part of its knowledge of the external world as are the ideas derived from any other source. Knowledge depends upon the content of the self-conscious centre and this content is to a greater extent the product of the activity of related

centres, than of the original impressions coming directly from the outer world.

These four areas of knowledge depend upon the growing definiteness of our ideas of space. They extend knowledge outward from the individual until every part of the universe is in some relation to him. The fifth area of knowledge depends upon time relations. The past, the present and the future become definite realities about each of which we have some definite knowledge, and between which there exists definite relations. The thought of a future world is thus acquired and predicates are made concerning it, depending on its supposed resemblance to the present world. Social relations and indirect activities lie mainly in this area of knowledge. The sensory feelings become so developed that future welfare is pictured as definitely as that of the past or present. Ideals and forms of thought are acquired, through whose influence choices having present welfare as their end seem less desirable than other choices which take the future into consideration.

The tendency toward indirect activities depends upon this development of the sensory powers. Definite pictures of the future show the inadequacy of direct means and make the indirect series of choices, pictured in the imagination, more attractive than the direct promptings of passion. The use of capital is one of the prominent results of this new development of the sensory powers, and with its aid the new requisites for survival are obtained which have made modern nations possible.

If this analysis of the extension of knowledge is correct, there are at least five areas of knowledge, which have different roots and depend upon different stages in the development of the sensory powers for their origin. Knowledge has not grown up from a single nucleus of ideas to which additions from time to time have been made by a logical process. Such a process might have been possible if the first being had been Adam-like, created with full mental

powers. We have ceased to regard the story of the creation of Adam as an historical fact, and yet we retain a concept of the growth of knowledge which demands a society of such men to make it a reality.

The growth of knowledge is not due to developed men coming in contact with more of nature. It is due to beings of limited sensory powers gradually increasing their powers as they are forced to know nature more intimately or to come in contact with larger areas of the world. requisite for survival has caused the development of some new sensory power, and has thus created an area of knowledge independent of the older areas, and in no logical connection with them. Knowledge comes by leaps and bounds when a new environment with new requisites for survival The new sensory powers have the same mechanism as the older powers have, but the ideas, forms of thought, and ideals of the new centres develop out of the new material without regard to the results of the activity of the older The pressure of the new situation and the need of new sensory powers force into the background the previously acquired experience. There is no way of blending the more definite knowledge of the older centres which was of use in other conditions and the less definite and more instinctive feelings of the new but partially developed centres. Reasoned action is of great service in situations which are thoroughly known, but is of little use in a strange environment. The new and the old knowledge are thus in opposition. The new centres must create their own experience and beliefs as they develop, and leave the blending and harmonizing of the different areas of knowledge to a later epoch.

§ 1. The Theory of Conviction.

If this view of the extension of knowledge is correct, it throws new light on the causes of belief and conviction. Knowledge is extended by the development of the sensory

powers. New centres force new facts and pictures upon the attention of the self-conscious centre, and the results of the activities of these new centres are belief and conviction. At the same time that these centres reflect sensory feelings. which are translated into knowledge at the self-conscious. centre, they also reflect motor feelings which become beliefs and create a conviction of the reality and objectivity of the knowledge that the sensory feelings have imparted. Beliefs. are unrestrained impulses to activity and these impulses. arise as soon as the knowledge and activity of a related centre becomes a requisite for survival. Belief is not something imparted from one idea to another at the self-conscious centre. This centre is as passive in its beliefs as it is in its sensory perceptions. Both perceptions and beliefs. are due to the activity of related centres and are reflected to the self-conscious centre as soon as the activity of these centres begins. Primary beliefs are as little related to one another as are the different areas of knowledge. requisite for survival modifies the mental mechanism and brings into activity a new group of centres. A new series of ideas and ideals is thus created and new impulses to activity are started. The importance of the new requisite for survival, upon which the creation of these new centres depends, causes the motor currents started by these centres to control the organism. The motor currents of the older centres are subordinated to the new currents, not by any process of reasoning but by necessity. It is a case of elementary evolution, a return to first principles. If the organism does not yield to the new impulses it cannot survive in the new environment. Each group of ideas, of forms of thought, and of ideals is created at a time when it must control the activity of the organism in order that the latter shall survive. The new impulses remain unrestricted so long as the requisites for survival which created them are not displaced by other requisites. The sensory and motor feelings of each epoch thus have time to blend and harmonize

and to grow stronger as they develop. In this way inseparable associations and beliefs are created which remain a part of the mind's possessions until they are destroyed by some opposition between them and other associations or beliefs.

The thought I wish especially to emphasize is that beliefs do not grow out of one another. There is no single stock out of which all the mental beliefs can be derived. The process of creating beliefs is not logical, nor is it the result of activity at the self-conscious centre. Each new requisite for survival starts new centres into activity and creates a new group of ideas and beliefs. As many independent beliefs are possible as there are requisites for survival necessary for the progress of the race. If the beliefs are less than this number, some of them have dropped out because the early requisites for survival have lost their importance, or because there has been an opposition between the beliefs which different requisites for survival have created.

It is not difficult therefore to account for the presence of a great variety of beliefs among men, or for the ease with which new beliefs are acquired. They are as much the result of contact with the environment as are the ideas and pictures of the sensory side of the mind. Each new group of objective conditions leaves open certain avenues for activity and checks activity in other directions. The sensory powers create a subjective environment to supplement these objective conditions. The activity of the organism is thus given a fixed direction and a belief is generated in the reality and objectivity of the ideas and ideals of this subjective environment, which directs the activity of the organism along possible and safe channels. The success of the organism creates a belief in the means by which this success was obtained.

If an organism always remained in one environment there would be a harmony between its various beliefs. The

human race, however, has many times passed from one environment to another, and in each it has found new requisites for survival. The beliefs of these different epochs are not in harmony, and are often the cause of internal conflict in the case of individuals and of external conflict between nations or classes in different stages of progress. So long as given beliefs are requisites for survival they are not called in question nor are they the cause of conflict. But when the epoch has passed in which they are really requisites for survival, or when their importance has been diminished by the presence of new requisites, they must be harmonized with the beliefs due to the new requisites and with the beliefs still older than they.

There are thus many groups of beliefs, due to past requisites for survival which are not now so important that they may not be called in question. When men become conscious of the opposition between their beliefs, some of them must be weeded out. The more important ones will still survive. The test lies in their relative strength or in their relation to the present requisites for survival. Progressive beings go through two stages of progress in each environment. In the first stage, because of new requisites for survival, new sensory powers and new beliefs are acquired. In the second stage the beliefs due to the requisites for survival of the last stage become ordinary beliefs, and can have their validity questioned. They must now be brought into harmony with other beliefs or some of them will be weeded out by the struggle which this opposition involves.

This second stage in each epoch of progress is intellectual and in it the reasoning powers are brought into activity. Reasoning is a process of weeding out beliefs. If conflicting beliefs are brought into conscious opposition, the weaker is rooted out, and in this way a harmony is restored among the ideas and beliefs of the subjective environment. No new beliefs, however, are created by reasoning. It is simply a process of testing the strength of beliefs and their necessity

to the organism at the present time. Formal logic is thus merely one form of scepticism. By its use the individual compares the different parts of his subjective environment and adopts an objective test of their relative validity. A host of conflicting ideas, axioms and intuitions, created at different stages of progress, are eradicated, and the efficiency of the organism is promoted by the harmony existing between the ideas and beliefs which remain.

§ 5. The Analysis of Reasoning.

Belief is, as I have shown, an unimpeded tendency to activity. When there is but one such tendency present in the mind at a given moment, this tendency realizes itself in the subsequent activity. If, however, two opposing tendencies are present, one of these must give way. If the process by which this result is secured is conscious, the act is due to some form of reasoning. When we reason we arrange the particulars under dispute so that they can have the full support of the group of ideas, forms of thought, and ideals to which they belong. We group particulars under general propositions because these general propositions are the clearest forms of the group of ideas in question. In this way each particular has imparted to it all the strength of more vivid beliefs, and cannot be disproved except on evidence which would eradicate the belief in the general proposition. With the general propositions the process of reasoning has nothing to do, unless they in turn are the particulars of some broader generalization from which they derive their force.

The primary beliefs are created by other causes and they cannot be strengthened by reasoning. They may, however, be weakened or eradicated by reasoning when they are brought by this process into conscious opposition to other primary beliefs of greater strength. Thus reasoning on the one hand strengthens secondary beliefs by putting them into conscious relation to the primary beliefs on which they depend. On the other hand it weeds out the weaker of two

primary beliefs by bringing them into conscious opposition. The end of reasoning is to bring the contents of the different areas of knowledge into harmony. Each new requisite for survival modifies the mechanism of the mind and adds to its beliefs and knowledge. The new area of knowledge is not the ontcome of deductions from previously acquired facts, but of new experience due to new sensory powers. These new acquisitions must be secured before reasoning begins. Reasoning does not extend knowledge; it merely solidifies and unifies knowledge.

Imagine, for example, a number of creatures, each of which has acquired its knowledge through some one sense, one by sight, the second by smell, the third by sound and the fourth by touch. Each being will have a peculiar concept of the external world depending on the impressions it has received. It will also have certain impulses and beliefs upon which its activity depends. In this case its actions will be mere impulses without any basis in reason. When, however, all these senses are possessed by one being there are four distinct areas of knowledge, and a conflict must arise between the separate groups of impulses and beliefs which belong to these areas. Reasoning will now begin. Each area of knowledge will have its validity tested by facts obtained from other areas of knowledge. Facts or events which can be verified by an appeal to more than one area of knowledge will have a higher validity than those for which no such verification is possible. Beliefs and impulses which depend entirely on the facts of one area of knowledge must give way to those which are in harmony with the content of two or more areas. Facts and events which cannot be verified in other areas of knowledge cease to be regarded as real and objective, and are looked upon as mere fancies created by the imagination. A being with but one sense could have no concept of degrees of reality. Each concept would have the same validity, and each impulse the same possibility of realization. A creature whose controlling concepts are obtained from the sense of sight, sees in each moving thing an object of terror. It objectifies each motion into a being. If, however, it obtains new senses and the power to analyze objects into their parts, it puts the mass of moving bodies into the category of inanimate objects. The impulse to fear moving objects is now checked by the facts of other areas of knowledge and some verification outside of mere motion is demanded, before a moving body is objectified as animate.

Reasoning is thus a process of giving a higher reality and objectivity to concepts by verifying them through facts obtained in different areas of knowledge. Each area of knowledge adds to the feeling of reality and objectivity if some of its concepts harmonize with those resulting from the earlier areas of knowledge. It reduces the extent of the real and objective in as far as there is conflict. One or the other group of supposed objective concepts sinks to a lower plane and is regarded as a fiction of the mind. The senses do not predicate reality and objectivity. Only those concepts are real and objective that stand the test of a verification in several areas of knowledge.

Many of these tests are not due to the senses, but are of a social nature. When knowledge is so extended that a part of it is derived from other beings, a belief in their veracity becomes a requisite for survival. This belief reacts upon the areas of knowledge derived from the senses and gives new tests of the objectivity of certain ideas. observations of one individual are not verified by his comrades, he doubts the objectivity of these unverified concepts, and thinks himself the victim of dreams and hallucinations. The social impulses thus give a new lever to the reasoning powers, and the impulse to objectify the products of the senses yields to the stronger impulse upon which social cooperation depends. If a social being attempts to objectify ideas without the consent of his neighbors, the impulse is brought into conscious opposition to the social impulses, and must vield. An insane person differs from other persons largely in the weakness of his social impulses. He has lost the instinct of verifying the objectivity of ideas by social evidence, and thus gives a reality to a host of ideas which a sane person would reject even though the senses of the latter gave the same testimony as those of the former.

Reasoning can never be an efficient means of securing harmony, except among persons with the same impulses. No matter how clearly and logically the sensory powers may arrange and contrast their ideas, no eradication or objectification of ideas can take place without the aid of the motor If the two opposing series of ideas do not call up motor impulses they will remain mere mental pictures without any power to displace each other or to influence conduct. Reasoning is a development of the sensory side of the mind and its function ceases when the sensory ideas have been placed in a clear and definite relation to one another. however, each of these groups of ideas is connected with certain impulses the conflict for supremacy rests with these Reasoning may bring more or stronger impulses into activity, but the final contest is between the two groups of impulses and not between the two groups of ideas.

§ 6. The Modification of Beliefs.

If the foregoing analysis is correct, beliefs are due to the activities which the environment of an organism permits. An adjusted organism has its sensory mechanism so arranged that clear ideas of the environment are formed, and its motor mechanism so organized that its dominant tendencies produce activities in harmony with its clear concepts of the environment. There must always be a harmony between the clear ideas of the sensory mechanism and the vivid, action-producing ideas of the motor mechanism. If the two mechanisms are not in harmony the activities of the organism clash with its environment, and either the motor mechanism must be modified so that other tendencies are dominant or it will be displaced by its competitors whose

sensory and motor mechanisms are more in harmony. The beliefs of an adjusted organism must, therefore, correspond to its environment. These beliefs, however, are not a thorough test of truth. They merely eliminate that part of the false which the environment of the organism allows it to test.

In progressive beings the adjustment between the sensory and motor mechanisms is repeatedly disturbed by the passing from one environment to another in which there are new requisites for survival. As a rule a local environment is given up for a more general environment. In this case. after the sensory mechanism has been developed to meet the new conditions, a modification of the motor mechanism creating new activities and beliefs weakens or destroys those which are out of harmony with the new conditions. race of beings, however, which has passed through several environments, has not the same activities and beliefs it would have had if the adjustment to the last environment had been complete and it had not advanced to the new environment Some of the beliefs of the earlier environments will be destroyed because incompatible with the new conditious, but many of them will remain because they are matters of indifference or of small moment.

There is another peculiarity of the beliefs of progressive beings of even more importance. If a belief arising in an early local environment is also useful in later environments, it will retain the form in which it first appeared and seem to depend upon these earlier conditions. The beliefs of a race in this case will not be enlarged in ways now possible, but they retain that cramped form which the older conditions necessitated. Two evils having a social importance flow from these facts. When a society is passing from a local to a general environment, the conservative element resists the change, because it involves the abandonment of certain old beliefs and the modification of others. Their form does not harmonize with the new conditions, and the radical

element in the society regards them as false or imperfect. Some of the old beliefs, however, are in harmony with the new environment, being such as would naturally be created by it in the course of time. There is thus an opposition between the historical conditions in which certain of these old beliefs actually arose and the present conditions which must, from now on, be their basis.

These facts make the transition to a more general environment a difficult matter. The important beliefs seem endangered, and many persons prefer a return to the old conditions, where these beliefs had their origin and are on safe ground, rather than to risk their ultimate verification under the new conditions. Both reason and experience seem to oppose the change; reason, because it shows the discrepancies between the old proofs of these beliefs and the new conditions; experience, because a brief period of life under the new conditions plainly shows the evils involved in the change. When the adjustment has been made to the new conditions the new and more general beliefs become requisites for survival and are more vivid than the older beliefs due to earlier and more local conditions. These older beliefs now tend to fade out and would disappear but for a process of reasoning which connects them with the more vivid beliefs of the new environment. The sources from which they were historically derived are forgotten or overlooked and they are given a new life by being made to appear like deductions from the new beliefs.

A good illustration of this tendency is given by the development of those economic doctrines associated with the name of Ricardo.* England during the first quarter of this century was in a peculiar economic environment because of the great inventions and the French wars. A series of economic doctrines arose each of which had its basis in some peculiar economic condition of the time, the basis being

^{*} See the writer's article on "The Interpretation of Ricardo," Quarterly Journal of Economics. April, 1893.

historical and inductive. At the eud of the period a broad generalization called the law of diminishing returns was made, based on the new conditions toward which English society was tending. As soon as this generalization was thoroughly established, the particular doctrines of the earlier epoch were made to appear as deductions from the law of diminishing returns. Both the historical conditions from which they were derived and the weakness of their inductive support in the new environment were overlooked, and they were given a new life through the chain of reasoning which linked them to the vital thought of the new epoch.

In this way old beliefs are kept secure long after the causes which originated them have passed away. This tendency also leads to that type of reasoning called reasoning in a circle. When a broad generalization based on a more general environment first appears, it gets its support from a series of particular propositions based on the conditions of earlier local environments. It seems an outcome of these propositions and, as they create the stronger beliefs, it must depend on them. The changed conditions, however, in time weaken the support of these particular propositions due to local conditions and make vivid and independent the broader generalization in harmony with the new conditions. By reversing the reasoning and making the older propositions depend upon the new generalization a belief in them is retained, although their inductive and historical basis is weakened or gone. The vivid beliefs thus support the more obscure beliefs. When reasoning in a circle is successful the beliefs of the old and the new environments are in turn made vivid by a clear presentation of the conditions on which they depend. If the reasoner imagines himself to be in the old environment its beliefs seem more vivid than the beliefs of the later epoch. When, however, the new conditions are visualized the older beliefs seem the weaker and need the support of those due to the newer

conditions. Reasoning in a circle always demands two such pictures and so long as both of them can be readily visualized they seem to support each other.

There are a few inferences from these facts which I wish to state in a more concrete way because of their importance in the subsequent discussion. When a race enters a new and more general environment, a period of transition must ensue during which the customs, habits and beliefs of earlier epochs must be modified or disappear. The more local the conditions to which given customs or beliefs are due, the more probable it is that they will be displaced by others in harmony with the new conditions. While the more general beliefs may have their form affected, they are not likely to have their content altered. They have already survived many changes from environment to environment, and probably conform to the most general conditions that our planet can furnish. They will, however, suffer from the disproof of many of the more local beliefs with which they have been artificially connected by chains of reasoning and from which they may have historically arisen. General beliefs are always stronger than they seem, because new conditions would generate them anew even if, owing to the weakness of their historical basis, they should fall into discredit. Local beliefs are always weaker than they seem, in spite of the mass of inductive and historical evidence they always have on their side. Each new environment displaces the local customs, habits and beliefs due to earlier epochs and creates a new group to take their place. In time these new beliefs will have the same solid array of inductive and historical evidence back of them that their predecessors had, and will harmonize as well with the general beliefs. static epoch gives an undue importance to the local and historical and narrows the support of general principles until they seem to depend upon present conditions alone.

CHAPTER IV.

A SOCIAL COMMONWEALTH.

§ 1. The Transition from a Pain Economy to a Pleasure Economy.

Before proceeding further in the discussion of the social forces the distinction between a pain and a pleasure economy must again be emphasized. Beings in a pain economy have vigorous motor powers but a low development of the sensory powers. As they pass from one environment to another the requisites for survival are determined by the enemies and pains to be avoided. Food and pleasure are of course necessary, but they are not the main objects of conscious thought. When such beings have developed their sensory powers far enough so that forms of thought and ideals are created which aid them in their activities, there is formed for them a pain society, the end of which is protection from enemies. There is a pain morality, the purpose of which is to keep persons from committing acts and putting themselves in situations which lead to destruction. There is also a pain religion, the purpose of which is to invoke the aid of higher beings in the ever recurring contests with enemies and pain.

In describing the leading features of a pain economy, I do not mean to imply that men in such an economy are constantly thinking of pain and never of pleasure, but that all their institutions have as their basis the fear of enemies and pain. The primitive state is formed, as Hobbes tells us, to secure protection from enemies. The primitive morality is some form of asceticism. When enemies abound the conscious pursuit of pleasure exposes a being to the attacks of these enemies and the consequent evils. The choosing of smaller instead of greater pleasures, and the postponement of

pleasures until the ends demanded for protection and security are obtained become the best means of prolonging existence. By the aid of these social forces in a pain economy many of the highest ideals of men have been formed. Connected with these ideals is a series of impulses which prompt individuals to activities in harmony with the conditions under which they have grown up. The most fundamental characteristics of the human race belong in this realm, and to the average individual they seem to be the only bulwarks by which society, morality and religion can be defended. Yet we are now in the transition stage from this pain economy to a pleasure economy, and it is necessary to see what changes will ensue and in what way ideals, forms of thought and impulses must be modified to meet the new conditions.

The causes of a pain economy lie in the environment. Vigorous enemies deal out death and destruction so freely that the thought of isolated individuals is concentrated on the causes and remedies for pain. The development of human society has gradually eliminated from the environment the sources of pain. The civilized world has been freed from dangerous beasts and reptiles, and the growth of large nations has cut off the danger of invasion by barbarous and warlike human foes. The objective environment is now merely the crust of the earth and its stock of materials and goods. The sensory powers have free play in analyzing this material into its elements, and in reorganizing these elements into valuable goods. These changes make a pleasure economy possible and destroy the conditions which made the subjective environment of the old pain economy a necessity.

It is not, however, to be assumed that the transition to a pleasure economy is an easy one. On the contrary, it is a most difficult process and one fraught with many evils and dangers. So many of the fundamental ideas, ideals and impulses of the race lose their efficiency through the change that mankind seems almost without a rudder to guide it

through its new difficulties. Historical evidence would seem to prove that a pure pleasure economy is an impossibility. Nation after nation has gone down when utilities instead of pains have become the supreme object of inter-Individuals as well as nations show the deteriorating influence of pleasure as soon as they are freed from the restraints of a pain economy. This tendency to deterioration. however, is an evil that belongs only to the period of A nation after undergoing the severe discipline of an unfavorable environment, suddenly finds itself transferred to a new environment where there is an abundance of utilities and no fear of enemies. The old safeguards to character are now inadequate, and it takes a long time to construct a new series of safeguards suited to the new conditions. In the meanwhile individuals sink into a state of lethargy or of vice, and the nation is so weakened that some new people, coming from a region where a pain economy still prevails, find it an easy conquest.

Consequently in those regions where a pleasure economy is possible nation after nation has risen and fallen, without ever developing sufficient strength to resist the encroachments of enemies disciplined by a pain economy. A pleasure economy cannot be formed by any kind of a revolutionary process. There must be a long period of transition in which the leading elements of the old economy are gradually lost and in their places the ideas, ideals and impulses of a pleasure economy are substituted. The development of modern nations has been along this path. Without a conscious departure from the old ideals of state, morality and religion, there has been a gradual substitution of certain ideals and impulses of a pleasure economy, until now all of our leading concepts are held in a dual form. One group of ideals and impulses is the conservator of past conditions, while blended with them is another group of ideals and impulses which is the outcome of the new conditions. Such a state of affairs cannot but be the cause of much confusion and distress. The only hope of progress lies in separating the present aggregate of forces into their elements and in finding to which group each ideal and impulse really belongs.

The present situation can, perhaps, be better described by returning to an elementary distinction. It has been shown that progress is due to the passing from one environment to another, each having certain requisites for survival. The purpose of individuals in passing from environment to environment is not progress, but an escape from competition. The easiest way out of present difficulties is taken even though some other path in the long run would better serve the ends of the race. The line of least resistance often forces progress to take a circuitous route, as when a river cutting its way to the sea often makes long curves to traverse a short distance because of some obstacle in the direct route.

When the race entered a pain economy it was forced out of the direct line of social progress into a series of environments where the requisites for survival warded off pain instead of promoting welfare. The early instincts, customs. ideals and religious forms of the race were at bottom safeguards from enemies and pains. In time, however, the conditions of a pain economy became less severe and some of the requisites for survival came from a pleasure economy. The line of progress then tended to come back to its normal trend, and now after a long detour, the race finds itself at a point on the normal line somewhat in advance of the point of departure. The environment no longer demands a pain economy, yet the instincts, habits and ideals of the race have been acquired during this long period of abnormal progress, and there are no proper guides for activity in the new pleasure economy into which the race is admitted.

To put itself into a normal condition, the race must construct an artificial channel from the point where it left the normal line of progress to the point where it now is. It must create with design the same impulses, habits and ideals which it would have had if the normal line of progress had

not been abandoned. The abuormal impulses and ideals of the pain economy must be discarded or reconstructed on a new basis. This necessity involves an enormous undertaking for the abnormal course of events reaches back far beyond the organization of men into societies.

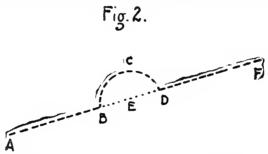
It is often assumed that this reorganization is an easy one to beings who have the faculty of reason to guide them. reason were that independent source of authority which many metaphysicians hold it to be, something might be hoped for from it. But reason acts only on the impulses that lie back of it and they are the slow accumulations of many ages. Doubtless a conscious progress can save the race from many evils and economize much time, but it cannot alter the order of development nor eliminate any of its steps. Nations cannot become fitted for the conditions of a pleasure economy without passing through a stage of progress where the elementary ideas and impulses are adjusted to one another by the crudest form of evolution. We are repeating this early process at present with a great loss of life and happiness. Individuals brought suddenly into a pleasure economy, fail to react against their environment, vield to temptation and sink into vice. The new impulses and ideals appear but slowly, yet perhaps we are far enough along to see something of their character and influence. I have said, they are already a part of our present stock of ideas. The new, however, is so blended with the old that it is hard to isolate them. Perhaps our religious ideals show the effect of the transition from a pain to a pleasure economy more plainly than any others. The concept of God possessed by primitive races is but little separated from their concept of earthly rulers. They serve Him as they serve their rulers from fear of the consequences of disobedience. It is a rule of fear tempered with a hope of protection from enemies. With a clearer perception of spatial relations their concept of God removes Him farther from the sphere of earthly rulers, but He is still thought of as a God

of war and an avenger of evil deeds. When the development of the sensory powers has progressed far enough to create a concept of natural law and of the universe, God is thought of as the creator of men and is supposed to use His power and foresight to ward off the evils which come from natural forces. When men advance far enough to see that a natural retribution does not follow evil deeds in this life, God becomes the final judge of the deeds of men. So far there has been a development of the ideas of a pain economy due to changes in the sensory powers of men. Force, power and omniscience are the leading characteristics of the ideal of God.

At length, however, a new thought appears in the form of the Christ ideal. Christ is not the God of war and hate. but the God of peace and love. He comes not as the ruler of men. but as their servant. He has so little power that a corporal's guard can crucify Him. With the appearance of Christ there was brought into the world a new group of religious ideas quite foreign to those previously entertained. The old ideals were fitted for men whose foes were external and from which they needed a protector. A God of power who was an avenger of evil deeds was a fitting ideal for men in such a condition. But when men are transferred to a pleasure world their evils are internal. They are their own foes. They want relief not from persecution, but from temptation. The concepts of a powerful God and of a future retribution are of little help to men in such a situation. They want rather a model for imitation, one who remains pure even though subject to the passions and temptations The likeness to man is emphasized in the Christ ideal more than the likeness to God. He is a better ideal because he is powerless and helpless.

§ 2. The Characteristics of a Pleasure Economy.

Since the human race is now in a stage of transition from a pain to a pleasure economy, it is useless to discuss the social forces upon an inductive or historical basis. Illustrations from history or inductions from present conditions are defective because the facts upon which they rest are the result of two groups of forces. It is not logical, therefore, to assume that the same results would follow if the conditions were so changed that the motives of a pleasure economy were the sole or at least the dominant motives. If we wish to discover the characteristics of a pleasure economy and explain its influence on the race we must make use of a hypothetical method and try to determine what would have happened if the past progress of the race had been due to a pleasure economy instead of a pain economy. I shall illustrate my method of investigation by using a diagram.



Let us assume that the broken line A B represents the series of environments through which the race passed before the pain economy began and that after this epoch the race passed through a series of environments represented by the broken line B C D. During this epoch the race is in a pain economy, and as a result the line of development deviates from its natural channel and passes by an indirect route from B to D instead of going by the direct route (B E D). Finally at the end of this epoch the race arrives at the point D and once more tends to move along the normal line of progress toward F. If while the race is at the point D we wish to analyze the social forces and determine their character and influence, we cannot use the historical method. The facts

of history all relate to the indirect route from B to D through which the race has passed, and these facts were determined by the forces of the pain economy. Such facts will be deceptive and from them few valid deductions can be made as to the future progress of the race. If we wish to find a basis for speculating in regard to future progress we must discover what would be the social forces if the line of progress from B to D had been through E and not through C. If the direct route along the line B E D had been taken, the race would have been in a pleasure economy and all the ideas, forms of thought and race ideals would have been those harmonizing with a pleasure economy instead of those suited to the conditions of a pain economy.

To illustrate my thought in another way let us suppose that when the race had advanced to the point B, it was divided into two parts, one of which located on the Western Continent and the other on the Eastern Continent. pose also that there was no further contact between the two parts of the race, and that the conditions of the one continent created a pain economy and those of the other a pleasure economy. Beginning at this point the development of the two parts of the race would have been radically different. Each part would have peculiar group of ideas, ideals and institutions, fitted to the conditions under which it existed. If at a later period when the psychic development of each part of the race had brought it to the point D, the two parts should again be brought into contact it would be possible to contrast the ideas, ideals and institutions of the two parts and thus determine by an historical and comparative method what were the effects of a pleasure and of a pain economy respectively. The development of the human race, however. has not been in two such parts, and we cannot compare the results of the two groups of forces working in isolation. There has been no pleasure economy. We must, therefore, resort to a hypothetical method and determine what would have been the ideals and institutions of a race with similar

sensory powers but with so different an environment that a pleasure economy would have been possible.

Let us, therefore, try to construct a pure pleasure economy and see if we cannot picture the progress of the race under such conditions. To have a pleasure economy of the kind I have suggested we will take an isolated island composed of one fertile plain. There must be no mountains where enemies may hide, nor may there be any physical or climatic variations through which differences in the people might arise and be the cause of conflict. The island must be free from all dangerous beasts and reptiles, so that no sensations or instincts of fear may arise. There must be no severe changes in climate nor irregularity in the crops. crops or marked changes in external conditions would tend to put the inhabitants in a state of opposition to each other and thus create the instincts of a pain economy. In short, there must be an absence of every physical difference which would favor dissensions and conflict, and thus bring on a state of war between the various individuals of this isolated I do not mean that there should be no emulation and rivalry between individuals or groups of individuals. Such feelings might be strong and yet if they did not lead to personal violence or to treacherous conduct there would be no instincts of fear similar to those of a pain economy. The essence of a pleasure economy is not absence of pain but of fear.

If these objective dangers and the instincts born of them were out of the way, the community would have its evolution directed by its economic conditions and by the subjective dangers which prosperity creates. An abundance of economic goods and the pursuit of pleasure would give rise to many forms of temptation, disease and vice. The surplus population would be carried off in these ways and not by any form of conflict or violence. No one would fear his neighbor, but he would have to learn to guard himself against the many short-sighted choices which would weaken

his physical strength, shorten his life, render him liable to disease, or lead him into vice. The families or individuals that did not succumb to these temptations would survive and produce a new generation with instincts and habits better fitted to the environment in which they exist. A series of such generations would create a type of man with instincts, ideals and institutions of such a nature that the temptations of a pleasure economy could be resisted. Each tendency to vice or disease would be counteracted by the influence of habits, ideals and institutions which would limit the choices of individuals in such ways that only innocent pleasures and amusements would be chosen.

It must not be assumed that the only thought of such people would be to increase their pleasures. While the greatest sum of pleasures might be attractive to individuals, vet their choices would of necessity conform to the conditions of social welfare or the race could not survive. The motives of a conscious calculating utilitarianism would be checked by social impulses which tend to promote the interests of the race. There would therefore be two prominent groups of motives—the one prompting actions which increase the pleasure of the individual, and the other prompting actions which promote the progress of the race. utilitarian instincts of individuals would be limited to proper fields through the impulses which the social forces generate. Each tendency to get pleasure at the expense of social welfare would be counteracted by the formation of some ideal or social institution with which would be coupled impulses prompting to their realization. The requisites for survival would be those social impulses which preserve individuals from temptation, disease and crime. The number of ideals and institutions would be gradually increased until their united effect would be strong enough to determine the choices of individuals and make their conduct conform to the interests of the race.

Such a society I shall call a social commonwealth. The

welfare of its members is its only end, yet this end is secured not so much by conscious calculation as by social impulses. In such a commonwealth the social forces would have free play. They would arise in a natural order and their development could be easily traced. All of these impulses would be of one class, and the ideals with which they are connected would be so harmonious that they would have a cumulative effect. I mean to picture the conditions of this social commonwealth and to contrast them with those of our present society. I shall try to show how the economic, æsthetic, moral and religious ideas and ideals of such a society would differ from those of the present time. In this way we can measure the influence of the forces of the pleasure economy toward which the race is tending, and see what effect the new conditions will have upon its ideals, impulses and institutions.

§ 3. The Economic Bonds.

If a social commonwealth were formed under the conditions I have named, the economic forces would constitute the first and elementary bonds uniting the members of such a society. These economic forces would be created by the conditions of the environment and would begin to operate as soon as individuals began a conscious pursuit of pleasure. I have assumed that the members of the commonwealth are not influenced by fear and that their only pains are due to a misuse of the goods abundantly produced by their environment. At first, therefore, there would be no bonds except those created by self-interest.

The bonds of this class which have attracted the most attention lie in the field of production. Men at a very early stage of progress became conscious of the benefits of cooperation. The knowledge that division of labor results in increased productive power, soon becomes a force in uniting men into productive groups and in holding them in fixed social relations. The need for capital is felt as soon as the

division of labor begins, and capital cannot be secured except by the protection of property on the one hand and by a growing desire for future welfare on the other. capital opens the way to serial production and widens the interval between the initial and the final stage of production. Finally, owing to differences in soil, climate and mineral products, commerce springs up, and thus the economic bonds which unite the people of each community are extended so that different communities have an interest in the welfare of their neighbors. In order to survive, each person would be compelled to join himself to some group of producers. If his instincts kept him aloof from all social groups, his productive power would be too small to enable him to hold his own in the struggle. If we assume that the land of this commonwealth is owned by the state or by a class of capitalists, such an individual would be unable to pay the rent which members of productive groups could pay. land equally divided, such an isolated man would be unable to live on the small plot which would be assigned to him as his share.

The aid of capital would give a similar advantage to those having the instinct to save and to provide for the future. Groups of such individuals working together would be able to undersell individuals working with their hands and by themselves, and in time these latter would be forced into such a condition of want that disease and vice would carry them This same desire for economic welfare would force communities to be social and friendly to one another. exchange of goods and the growth of credit would develop in individuals and in communities the feeling of honor, the love for truth and the desire to live up to their contracts. These economic virtues appear as soon as the desire for economic welfare becomes strong. The sacredness of property and the right to undisturbed possession of the means of production depend upon the same conditions. demand for economic justice and equality are the products of the desire for welfare. If no feelings of opposition between individuals or communities are aroused by the conditions of a pain economy, the promptings of self-interest and of personal welfare are sufficient to unite individuals into communities, and communities into a social commonwealth.

These obvious bonds due to the conditions of production are, however, not the only economic forces uniting men into a society. The conditions of consumption, especially variety in consumption, also create economic bonds. The earth is more productive when a variety of goods is desired than when only a single article or a few articles are demanded. The cultivation of a variety of crops makes land more productive and demands less labor than any one crop. If the diet of a people were composed solely of wheat, potatoes or rice, a large part of the land would be worthless and the productivity of the rest of the land would be much less than if the diet were made up of many articles. Persons with varied diet and many wants in harmony with the conditions of their environment have a decided advantage over persons with simple diet and few wants. The latter class would require a larger area of land to support a given number of persons and would thus be at a disadvantage in an economic contest for survival. On the other hand, a greater variety of wants creates greater dependence upon other places and groups of producers, and thus unites the different communities and producers more closely than would simpler The smaller the variety of the and less numerous wants. wants is the stronger must they be in order that the individual shall keep alive. A diet of potatoes or rice is possible only for persons who have strong appetites for those articles. They are so lacking in certain nutritive qualities that enormous quantities of them must be eaten to supply all the needs of the system for food. In a varied diet the different elements supplement each other, and thus a smaller quantity of food will satisfy the needs of the system. A man with a weaker appetite will, under these conditions, be vigorous

enough to survive. He will also get more pleasure from his food. The change from one kind of food to another revives the appetite and raises the intensity of satisfaction above what it would be if the consumption of some one article were continued until the needs of the system were satisfied. Groups of individuals with varied diets, therefore, will have an advantage over more primitive men with simpler diets and stronger appetites, and in a strictly economic competition will displace them.

The more primitive man with strong appetite is at a disadvantage even if his economic welfare is assured. strong appetite for a few articles leads him to use too large a portion of his income for purchasing these articles. desire for them holds out so long that the needs of his system are more than supplied and hence a tendency to disease and vice arises. In a social commonwealth many diseases and vices would arise from this source. Where economic goods are abundant, any strong desire for single articles will lead to an excessive consumption, and the tempted individual will in time suffer from disease or fall into vice. society vice will be due to desires for particular goods so strong as to be injurious to the consumer, and not to tendencies to injure other persons by hostile acts. Men with strong appetites will, therefore, be especially liable to disease and vice, and will be at a marked disadvantage in an economic contest for survival.

In establishing economic bonds the harmony of consumption is not less important than the variety of consumption. We add much to our pleasure from what we consume by grouping goods in the right way. Certain articles when consumed together create a joint utility far above what the articles would give if consumed independently. It is necessary, therefore, to cultivate correct habits in grouping the goods we consume and to see that each article gets into its proper place. At each stage of civilization some elements must be given a dominant place in each department of consumption,

while other articles must harmonize with these leading elements or be rejected. In food, in clothing, in home decoration, in architecture, and in other departments of life the importance of this principle is manifest. In deference to it certain types of consumption are created to which all individuals must conform or else do without a considerable part of their possible utilities. Certain standards are thus created which determine the character of a civilization.*

With the progress of the race these groups of harmonious goods grow in size and constitute the basis for many social institutions. The home, the church, the club and other similar organizations are the means of supplying desirable goods in harmonious groups in a manner that is out of the reach of isolated individuals. By the pressure of their wants individuals are compelled to unite into social groups. The economic disadvantage of isolated individuals is so marked that no other principle is needed to force men into social relations. Not only must they unite into social groups, but they must also continually tend to increase the number and size of these groups.

In a social commonwealth two tendencies would show themselves. The individuals with the stronger appetites would have their consumption confined to a few articles, and would seek to increase their pleasures by consuming increasing quantities of these isolated and unharmonious articles. Drinking and feasting would be their main sources of pleasure, and the tendency to over-indulgence would create disease and vice. The persons with weaker appetites would seek to increase their pleasures through an increased variety and harmony of consumption. They would be forced by this tendency into many social groups and be compelled to accept social standards for their conduct. These groups would conform more fully than individuals could to the

^{*}For a more complete discussion of this topic, see the writer's monographs on "The Consumption of Wealth" and "The Theory of Dynamic Economics."

conditions of the environment, and would have an advantage in an economic contest for survival.

The economic forces, therefore, are sufficient to create powerful bonds uniting the individuals into a social commonwealth even if they feel no other motives than those due to the pursuit of pleasure. These motives, however, must operate steadily and during a long period of time. There must also be an absence of the instincts and habits of a pain economy, and no possibility of those conflicts which it occasions. Survival must depend upon the power of individuals to resist temptation, disease and vice, and not on the power of a group or race to crush out and destroy its enemies. The desire for welfare may compel progress if each individual makes for himself the decisions upon which his welfare depends.

§ 4. The Social Bonds.

The economic bonds are the effects of a more or less conscious calculus of utilities. A social commonwealth held together by no other bonds might prosper, but it would purchase prosperity at a great price. Each generation would be forced to test for itself the various combinations of goods and by experience learn whether they promote or retard welfare. Each individual would have to face the temptations connected with intense pleasures, out of harmony with permanent welfare, and resist them through conscious motives. There would be no check to the actions of individuals when their interests conflicted with the welfare of the race. Social ends would be subordinated to those of individuals and progress would be checked long before it had reached its goal. The social bonds supply this defect. The permanent interests of the race cannot be left to the conscious calculations of individuals. Instead of this slow and uncertain process of attaining results, a mental mechanism would be created which would call into activity certain race ideals and impulses to limit the area of conscious calculation.

and to facilitate choices in harmony with social welfare. The pursuit of pleasure would remain the conscious end of individuals, but choices dangerous to society would be shut out by the visualization of race ideals and the impulses they create.

The race ideals are an outgrowth of the same process through which harmonious groups in consumption are formed. To give an example, a home in primitive times was simply an aggregate of goods having a definite sum of utilities and was valued in the same way as other groups of goods. In time, however, more goods are added to the original stock of utilities and they all blend into a harmonious group. The particular goods forming this group are lost sight of, and the ideal of a home becomes more prominent than its itemized elements. The ideal home is more than the sum of its parts. Elements are added to it by the mental mechanism which give it a more important place in determining action than could belong to the sum of the utilities it creates. A home now becomes a requisite for survival, and impulses and beliefs are created which protect it and demand the realization of the ideal it presents.

Each group of capital goods has a definite value to a producer, and adds a definite sum to his utilities. They are produced and consumed in each period of production. Capital as an ideal is a permanent fund which, although its parts are constantly replaced, is never used up. It is associated with future welfare and becomes a requisite for survival as soon as a vivid ideal of future welfare is created by the mental mechanism.

I might give many examples of how groups of economic goods with a definite sum of utilities are changed into ideals and are no longer thought of as definite sums of utility, but as requisites for survival. There is, however, little need of details in the present case. I desire to explain the process by which ideals are formed out of definite sums of utility rather than to enumerate all the instances where such

a transformation has taken place. It is enough to know that when ideals are formed out of groups of goods, the end of the ideal is realized by an impulse and not by conscious calculation. Impulse and belief are the forces by which the requisites for survival are secured. Reason and calculation control action only when welfare and not survival is at stake.

In a social commonwealth, after the formation of certain economic ideals, the æsthetic ideals would be the first to appear. They lie nearest to the economic world and are an outgrowth of its intense pleasures. Simple æsthetic ideals seem to be the result of the blending of distinct groups of pleasures into one larger group. In this way the interest and intensity of pleasure can be sustained for a much longer period than if an object is the source of a single group of pleasures. When the intensity of pleasure derived from one group is lowered, the thought is transferred to some other group, and the interest and pleasure are revived. are a number of such groups combined in an object, one after another of them attracts the attention and becomes a fresh source of intense pleasure. Æsthetic goods may be said to be goods without that point of satiety which is found in simple economic goods. The marginal utility is sustained by the transference of interest from one group of pleasures to another.

Such simple æsthetic pleasures, however, are quite different from the complex ones which attract attention in our present civilization. Æsthetic pleasures have never had an opportunity for normal growth, because the social requisites for survival sprang from morals or religion. The result is that but few forms of æsthetic pleasure have been acquired and these are so disconnected and complex that their development is not easily traced. But in a social commonwealth they would appear in as many forms as there are harmonious groups of economic goods. The impulses they create would be the first means of subordinating the interests of

individuals to that of society. Through them the crude isolated pleasures of primitive men would be displaced by harmonious groups of refined pleasures. Disease, dissipation and vice would be restrained and many temptations would be eliminated.

Æsthetic ideals are concerned only with the present. They lead to the best utilization of all the goods by which the members of a society are surrounded. If certain forms of consumption are prevented or their utility reduced it is because these pleasures shut out the enjoyment of other pleasures and reduce the number of goods from which enjoyment may be had. The æsthetic ideals secure the largest harmonious groups of goods which the society can produce. The ejected articles may give intense pleasure, but they can be enjoyed only under conditions adverse to social welfare.

Æsthetic ideals would be supplemented by moral ideals as soon as future welfare could be vividly contrasted with present welfare. Definite ideals of permanent welfare are formed, and conduct which does not tend to their realization is stamped with moral disapproval. Strong impulses arise to secure a conformity between acts and the ideals projected by the mental mechanism. In our present civilization the moral ideals were developed at so early a stage of progress that the æsthetic ideals, which in many instances should control conduct, were displaced. In a pain economy the pursuit of pleasure is dangerous. In the intervals between wars and conflicts a life of pleasure causes men to degenerate and thus unfits them for future wars and conflicts. Moral ideals must, therefore, create an impulse against the pursuit of pleasure and limit the activities of individuals to those fields where future welfare is prominent. In the short periods of peace and economic prosperity there is no time for æsthetic ideals and impulses to become sufficiently strong to free the pursuit of pleasure from its temptations and evils. Æsthetic ideals cannot become requisites for survival until the conditions of a pleasure economy have endured for a long period of time.

At present there seems to be an opposition between moral and aesthetic ideals which would not be possible in a social In it dissipation and vice would find their commonwealth. strongest foes in the æsthetic ideals and impulses. influence of moral ideals would be limited to actions which affect the future welfare of the race. Moral ideals would have their character affected by this change, but their importance would not be reduced. Some of the present ideals would lose their force, but their places would be supplied by new ideals which would control actions now left to the uncertain results of conscious calculation. ideals are positive in their influence and tend to group the consumption of individuals in the most harmonious manner. Moral ideals are negative and tend to eject the discordant elements and activities which prevent the realization of all the possibilities of permanent welfare.

The religious ideals and impulses would be the third group of social forces to appear in a social commonwealth. tic ideals promote the best utilization of present conditions. Moral ideals tend toward the realization of the permanent possibilities of our planetary existence. The development of the sensory powers, by which the extent of the universe becomes manifest and the perception of the small part which our planet must play in the history of the universe, cannot but create ideals of greater possibilities than those which can be realized on our planet. All parts of the universe will be thought of as peopled with beings differing widely from those living on our planet. In so vast an area with the most diverse economic conditions all possible organisms would have an opportunity to develop; and somewhere in the universe every possible type of being from the highest to the lowest might be found.

The possibility of establishing relations with beings in other parts of the universe could not but form an inspiring ideal. The feeling that a larger social commonwealth already exists and that the higher beings in such a society might establish relations with us and influence our progress, would create ideals and expectations which would cause the actions of individuals to deviate from what would otherwise be the normal channels. Religious ideals are a necessary consequence of the growth of the sensory powers, and the resulting increase of knowledge of the forces and laws which control and regulate the universe. The defects and limitations of our planetary existence are thus made manifest, and another world in which the possibilities of a perfect existence can be realized, becomes a conscious ideal.

The feelings which these religious ideals create would react upon and modify the moral ideals just as the moral ideals exercise an influence on the æsthetic ideals. three classes of ideals, forming one harmonious group, would create a series of limitations upon the tendency of certain individuals to lose sight of social ends in the too eager pursuit of pleasure. All the social bonds in a social commonwealth could be analyzed into impulses made by one or another of these classes of ideals. These ideals and impulses would, however, differ largely from our present ideals and impulses. They would be more simple and the social element in them would be much more visible. influence of a pain economy has distorted the development of our ideals and impulses and turned social progress out of its normal path. We must, therefore, take up these problems more in detail and try to show the normal path of progress.

§ 5. The Social Man.

The historical conditions resulting from a pain economy have produced a wrong concept of the motives which would control a social man and of the institutions by which he would surround himself. The presence of foes on every side and the need of strong national governments to resist their encroachments, have compelled individuals to subordinate

themselves to the central authority. National existence is an essential for survival, and all other institutions have had their growth dwarfed by the necessity of maintaining a strong government. When such a government is once established, it is easier to use the power of the state to create other institutions than to allow them to develop in a normal way out of the economic conditions which foster their growth. In our modern societies institutions are united into a single group and made dependent upon a central authority in a way which would have been impossible in a social commonwealth. A reaction against this centralization of institutions has created the tendency which we call individualism. The individual seeks to throw off the yoke of this central authority and to determine his actions for himself limited only by the promptings of reason and utilitarian calculations.

This opposition between what we call individual and social instincts would be unknown to the citizen of a social commonwealth. There would be for him no need of a strong central power to protect from foreign foes, and hence no one institution could become a requisite for survival, superior to all others, and thus be able to subordinate all other institutions to itself. Institutional life would be the outcome of the desire to avoid the temptations and evils of a life of pleasure, and not the result of the fear of foreign foes. economic necessity and each source of temptation would be the basis upon which some institution might be built up. An institution is the means of realizing an ideal. would be as many institutions as there are separate ideals When the mental mechanism projects to be realized. an ideal, the activities of a person are grouped in a way tending toward its realization. Social relations are entered into with other persons having similar tendencies, and habits and customs are formed which produce in each member of the group the same impulses. From this result unity of action, a feeling of confidence in other persons and a willingness to rely upon their promises.

These institutions are of two kinds. They are either means of organization by which the amount and variety of economic goods may be increased, or they are connected with the consumption of goods and insure the best utilization of what has been produced. Each trade and industry having a peculiar organization or requiring special forms of skill and knowledge would tend to produce a separate form of institutional life, through which the ends of the industry would be promoted. Each of the evils to which the members of such a society would be exposed—such as sickness, injury, premature death, the loss of property by fire, the risks of business—would cause a new institution to arise by which its evils could be obviated or its burden better distributed.

In the same way other institutions would arise within the field of consumption, the end of which would be to correlate and harmonize the pleasures of each person better than it would be possible for him to do if he remained isolated. Family life, the church, the club, labor unions, trade organizations and a great variety of associations designed for special classes of men and for the gratification of particular desires, would spring up in a natural way, as soon as the needs, desires and temptations of social life became apparent. Each of these institutions would force those connected with them to modify their conduct in certain particulars and to acquire certain habits and modes of thought, which would fit them for the social life which the institution creates.

The character of each individual would be moulded by the group of institutions under which he chose to live. In each of his activities he would be under the guidance of some institution by which he would be prevented from wasting his productive power or from falling victim to some momentary impulse. No one institution could acquire a dominant place nor would a person be continuously under the influence of any one institution. With each activity a new group of ideas, modes of thought and ideals would be projected and visualized by the mental mechanism which would control

the person so long as the motives which lead to this action are dominant. When new motives make themselves felt. the influence of this institution would be weakened, and the individual would seek to realize the new ends under the guidance of some other institution. The motives and activities of each person would determine the number and character of his institutions and the extent of the influence Individuals would be compelled to accept of each of them. these social institutions, not by external force, but by the promptings of internal motives. Each person must become social or reduce his productive power and subject himself to temptations which he could not withstand. The less social would thus be gradually weeded out, and those remaining would give a willing compliance to the conditions which their social institutions set for them. When new economic conditions made it possible to satisfy additional wants. the pressure of new desires and the appearance of new temptations would result in new institutions or extend the influence of those already in existence. The institutions of a race will conform to their wants and activities, unless some external condition cramps their development.

The citizens of a social commonwealth would not understand what a state is if the word were used in its present sense. Each institution would exert its own power in the way in which the family, the church and many other social and industrial organizations do at the present time. The members of a board of trade and of many labor organizations are, for example, under more restraint to-day from the rules of these bodies than from the civil law. All social institutions would exert a similar power over their own field if they were created by economic conditions, and were not checked in their development by extraneous causes.

In many respects the institutions of a social commonwealth would operate in a manner more like those of the Middle Ages than those of the present century. Each locality and trade could make its own regulations, and these rules would

control the members of each organization. The guilds of the Middle Ages controlled, however, only the productive acts of its members. In a social commonwealth the consumption of individuals and all their activities would be under a similar control. There would be much less freedom of choice than at present, even though there is an absence of external force. That part of conduct controlled by impulse would be greatly extended, and the field of conscious calculation would be limited to acts so complicated and irregular that no institution could be devised to regulate them.

I have in this picture of a social man tried to illustrate how he would act if the social forces were the only ones that influenced his conduct. The weight of authority might seem crushing to persons educated as are the people of the present age, yet it would not resemble that which any form of state socialism would exert. No institution would have the dominant place which the state now has. State socialism is an ideal of those who are suffering from the evils of a pain economy, and wish a more speedy remedy from present evils than the growth of social institutions can offer.

§ 6. Social Morality.

Moral feelings, perhaps more than any other of the social forces, have been diverted from their course of development by the influence of the pain economy under which the race has existed for so long a period. Where fear forms the dominant motive in determining action it becomes the chief agent by which moral doctrines are enforced. It is so much easier to form vivid ideals of future evils than of future welfare that the evil consequences of bad acts are pictured instead of the good results of praiseworthy acts. Persons are forced into right conduct, not because they are impressed by its beauties, but because every other kind of action seems so undesirable that the right act is the only available choice.

When the perception of future relations creates vivid

ideals of future misery and future welfare, the fear of misery, instead of the hope of welfare, becomes the controlling motive. All the possible sources of pain are brought together into one group, and so blended as to have an accumulative effect. Retribution thus becomes the prominent means of enforcing moral rules. An inferno of some sort is created, in which the doer of evil deeds suffers a loss much greater than the additional present pleasure secured by the bad act. Right conduct is enforced by adding units of pleasure to the welfare side. Thus a balance of pleasure is secured for moral conduct, but it is at the expense of social welfare.*

This type of morality is in harmony with the conditions of a pain economy and is effective so long as these conditions prevail. It loses its force as soon as a more complete knowledge of the future destroys the unity and reality of these ideals which fear and pain have created. The idea of retribution had its origin in those primitive conditions where each race, surrounded by bitter foes, resented with violence any invasion of its rights. Retribution is the idealized dread of these foes. Every act contrary to the interests of the race is represented as the cause of the evils which these foes cause. It is, therefore, possible to create, by these indirect motives, the conditions of prosperity more easily than by an appeal to future welfare.

The idealization of the conditions causing pain is so much more simple than a like picturing of the conditions of pleasure that for social purposes the former class of motives can be made effective at a much earlier period in the development of the race than can the latter class. No single pleasure is as vivid as are single pains. It is only when the harmony and variety of consumption become apparent and create the great race ideals, that anticipated pleasures acquire more force than anticipated pains.

^{*} See Patten, "The Economic Causes of Moral Progress," Annals, Sept., 1892.

The basis of morality is also obscured by other circumstances. The isolation in which the different parts of the human race live and the presence of hostile races and nations cause a part of the moral feelings to assume a peculiar form which we call patriotism. The permanent interest of a part of the race living in a local environment, with but a small part of the possibilities for progress which are open to the whole race. is made the standard for action and the basis for ideals. These standards and ideals check the growth of normal moral ideals and divide the field of morality into two National morality is associated with national interests and contests. Because of the temporary and fluctuating character of these motives, such morality cannot avoid having a local coloring and being checked in its development before it has become so enlarged as to represent the permanent interests of the race. It must remain a low type of morality because it reflects, as it were, the morality of a race on a planet of much fewer possibilities of moral progress than are presented in our world.

Religious morality gets its motives not from ideals in harmony with the permanent interests of the race on this planet. but from the ideals created by the larger possibilities of the whole universe. It is believed that when a person ceases by death to be connected with a national unit he becomes a member of an immortal society which controls the universe and utilizes to the fullest extent all its possibilities. His interests demand therefore that he prepare himself for this future state rather than use his time in improving the conditions under which his descendants will live. The loss of welfare for himself in a future life becomes a more vivid ideal than the loss of welfare by his successors in this life. The higher moral interests are enforced by making their realization a part of the conditions by which welfare in another world is secured. instead of enforcing them by means of vivid ideals of the permanent interests of the race in this world. Morality is thus subordinated to and blended with religion in a way that destroys its independence. With strong national feelings on the one hand and strong religious feelings on the other, the true moral motives are dwarfed and their normal development prevented.

In a social commonwealth there would be no national feelings, because there could be none of those conflicts upon which the growth of national feeling depends. The moral ideals and impulses would precede in time the religious feelings, and hence they would stand on their own basis and have a normal line of progress. Moral ideals would be the outgrowth of economic and æsthetic ideals, and would be associated with them more intimately than with patriotism and religion. The economic ideals create a willingness on the part of isolated individuals to live and work together, and a desire to provide for the future. The æsthetic ideals eliminate the cruder forms of consumption and increase the utility of goods by adding to the harmony of their arrangement. Moral ideals supplement these ideals by making the conditions for the permanent welfare of the race prominent motives in the actions of each generation. Because of them there would be no national contests compelling the people of one age to sacrifice the future interests of the race in order to secure present existence. There would be no religious motive causing persons to value individual redemption in a future life more highly than the improvement of the condition of their descendants in this life. The highest ideals would be those relating to the future of the race. The more vividly these ideals were pictured by the mental mechanism the more certain would be the survival of the individual and his descendants.

To picture a normal society in this stage of its progress we must assume a less complete development of the sensory powers than men now have. They must not know that our world is only a planet upon which, at some time, life will die out. They must not be aware of the fact that there are other worlds with greater possibilities. They must think

the immortality of human beings upon this earth to be possible, or at least they must suppose that a human society is a permanent reality with ever increasing possibilities and length of life for its members.

That it is possible for human beings to foster such ideals and make them a force in determining conduct is shown by the vitality of the democratic philosophy prevalent at the close of the last century. Many of the leaders of the movement that created the French Revolution believed in the perfectibility of man and in the possibility of an immortal state on the earth. They thought that if governmental oppression and religious persecution were done away with, a new society could be established and the basis secured for the rapid development of a perfect man. Much of the force of democratic ideals is due to these concepts, and if it had been possible to promote the growth of these ideals without race or class conflict, the thought of human perfectibility and immortality would have remained among the ideals which democracy hopes to realize.

Moral ideals, if unmodified by the conditions of a pain economy, would create motives by which temptation would be resisted rather than motives by which retribution would be avoided. There would be in a social commonwealth no enemies to avoid, no infernos to fear. The burden of sin and the power of temptation would be more fully realized than at present. Human shortcomings would be due to the gratification of intense present pleasures at the expense of future welfare. Acts of this character would involve social condemnation, and also a feeling of intense anguish, because of the lack of conformity between these acts and the ruling ideals of the delinquent. The feeling of sin and remorse will always be intense when the acts and ideals of an individual do not harmonize. The conflict between the flesh and the spirit is ever present to a tempted individual.

This opposition between temporary and permanent interests is necessary to progressive beings in a pleasure economy.

It would not be a part of a pure pain economy. The fear of punishment rests on the idea of enemies superior to self. The feeling of remorse rests on the idea of a self-condemnation due to self-imposed standards and ideals. gust with self follows weakness when tempted by pleasures. The doctrine of human depravity is an induction based on the shortcomings of men in a pleasure world; but for these temptations consciousness of sin and remorse would be absent. Under these conditions moral ideals would have in a social commonwealth a restraining influence even greater than that which they now exert. Each deviation from the conditions of future welfare would be checked by the impulses which the moral ideals create. Each economic motive and æsthetic impulse would be supplemented by a moral impulse. The unity and harmony of these three groups of forces would give an advantage to those members of society in whom they were the strongest and eliminate from it those persons or classes who overestimate present happiness or tend toward dissipation and vice.

§ 7. Social Religion.

Religion was the first conscious force binding men together, and yet in the normal order of development it should have been the last of the social forces to appear. The cause of its early appearance is found in the conditions of a pain economy. When surrounded by vigorous living foes the isolated individual feels helpless and demands a protector more powerful than himself. The need of leaders and heroes is so urgent as to constitute them requisites for survi-There springs up among the members of a group a feeling of dependence, of loyalty for their leaders and heroes who ward off pains and protect from foes. this faith and confidence in superiors social life could not develop in a pain economy. The presence of foes thus tends to unite higher and lower classes of men into one group and to create social feelings between them rather than between the members of one class. The person who directs and controls the group gradually increases his power over his followers and also the distance between him and them, until he becomes an absolute ruler and the dispenser of all material goods.

The weak and helpless admire a display of power. A people fearing foes and powerless before natural conditions become hero worshipers and trust their welfare to heroes rather than to their own united wisdom. this way a gulf created between the heroes and their followers. The heroes are external to the society they govern, and have other powers and qualities than their subjects. cases of emergency and distress the hope of success and relief is centred around the activity of heroes and not around In the idealization of these conditions that of the people. so as to build a concept of the universe, God is placed outside of and behind the universe just as the heroes on earth are external to and above the society they rule. is thought of as the creator of the universe and the source of all life and power. In this way He is placed completely outside of society and is not subject to any of its laws. Such a concept of deity is satisfactory to beings whose first thought is to avoid pain and to secure protection from enemies. By its aid primitive people create social forces which unite them into groups and inspire them to action.

In a social commonwealth there would be no basis upon which a development of this kind could take place. There would be no fear and no need of protection. The higher ideals of the people would be associated with progress and with freedom from temptation. Social progress would be thought of as due to the united action of all the members of the society. The heroes of the tempted would not be powerful beings who never felt the force of temptation. Power is needed for conflict, but self-control is more important to the tempted than power. A tempted person will, therefore, idealize in his hero a different group of qualities from

those chosen by a person suffering from pain and oppression.

In a social commonwealth the grouping of individuals to secure common objects would be natural, and it would be seen that united action was necessary to extend the control of man over nature. Individuals would look to society as the source of all power, superior to that which they could exert in isolation. They would idealize society and make it the source of the desired control over nature and natural forces. No hero would acquire so high a place that his power would compare with that of the society of which he was a part. Hero worship would not become so important that the members of society would look to their heroes rather than to their united action for the source of the power from which future progress should come.

There would, however, be a cause for hero worship in the need of intelligence to overcome the natural obstacles to progress. Power would be thought of as an attribute of society and nature, but intelligence to control society and nature would be a personal attribute. Intelligence would be idealized in a social commonwealth just as power is idealized in a pain economy. The God of that commonwealth would be a God of intelligence working through society and nature. Force would be looked upon as the outcome of mechanical contrivances and not as an attribute of beings. Intelligence by using mechanisms becomes a power, but is not by itself a power. It is in fact the antithesis of power. The less mechanical a being is, the greater is the possibilityof its intelligence. Therefore, intelligence, to be idealized, must be separated in thought from the mechanisms through which it acquires power. An all-powerful being becomes a mechanical concept to persons whose sensory powers are so developed as to distinguish sharply between power and intelligence. The latter alone is a personal attribute, the former belongs to the domain of nature.

When the members of a social commonwealth should finally

discover the limitations to a society on this planet, and begin to idealize the conditions of the whole universe in the hope of realizing its larger possibilities, they would use the stock of ideas and ideals already acquired in their past development. Power would remain an attribute of society. while intelligence and self-control would be the great virtues. Men would conceive of a greater society to control the forces of the universe similar to the lesser society which has been the means of extending their power on this planet. The heroes of this greater society would be beings endowed with intelligence and self-control. They would be within aud a part of society, and not above and outside of it. The possibility of greatness in heroes would, however, be immensely extended, because this larger society would not be homogeneous like the society on the earth. All kinds of beings would be parts of this society, and not a single type of beings as on this planet. The differences in beings which here are the cause of a pain economy would there be an added source of strength. Intelligence could operate in so many more ways that its power and influence would be greatly extended.

There would be the same beliefs that now prevail with us in regard to the relations between this greater society and the social commonwealths. The higher society would be under moral obligations to help the lower society. If such a society exists it must at some time be expected to manifest itself in some form to persons on this earth. There would, therefore, be an anticipation that some revelation of the higher society would be made, or a belief would exist that such revelations had been made in the past. In short, the conditions would be present upon which the belief in a revealed religion could be built up. The Christ ideal would be a possible ideal and be even more potent as a moral force than at present. tion, vice and dissipation would be the evils against which the members of a pleasure economy must guard themselves; the ideals which raise men's thoughts above temptation would become the great social forces.

The Christ ideal contains all the elements needed to attract the tempted away from vice. Christ is the idealization of the greatest possibilities of human beings. He represents the Incarnation of the highest form of life. He is thought of as having desires like men and yet being as pure as if He lived out of the world of temptation. He is helpless in conflict and shows in His death the separation of power and intelligence. His resurrection tests the power of the higher society to save its hero. The story of Christ could not but have a great influence in a society in which the evils of a pleasure economy were becoming apparent. In a social commonwealth it would present the highest ideal to which a society could reach and it would have a much greater force as a model for imitation and as an inspiration to noble action than at present.

Our religion is composed of two distinct elements—a God of power due to an idealization of the conditions of a pain economy, and a God of intelligence and love due to the conditions of a pleasure economy. It is the latter ideal which forms the basis of a social religion and protects persons from the evils of a social life in which pleasure is the prominent element. As the social elements grow and men acquire more confidence in the power of society to protect its members and to advance their interests, this ideal cannot but gain in force and in the clearness with which it is projected and visualized as an element of the objective world. The hope of a higher society to remedy the defects of our planet must crystallize into a series of ideals not greatly differing from those which the progress of the Christian religion has created.

CHAPTER V.

NORMAL PROGRESS.

§ 1. The Stages of Social Progress.

It is only in a social commonwealth, such as I have described, that the normal trend of progress can be seen. When a race is for a long period under the influence of a pain economy, ideas and ideals do not arise in their natural order. The influence of pain and fear cause a much earlier development of morality and religion than would otherwise take place. Economic motives become a determining force only after the evils of a pain economy are sufficiently removed to allow a conscious pursuit of pleasure. The æsthetic motives which normally should follow after the economic motives do not acquire sufficient importance to become requisites for survival. Therefore there is but little weeding out of the unfit from an economic and still less from an æsthetic standpoint; nor are economic and æsthetic ideals impressed upon the race in such a way as to make them effective.

The normal order of social forces must depend on the order in which the mental powers of men develop. Institutions, beliefs and ideals which depend on complex mental states and on the union of many areas of knowledge should follow the more simple forms of the subjective environment which demand a less complex mental mechanism for their visualization. Peculiarities of the environment may contract some of these stages or prevent their full development, yet if we look in the right places the beginnings, at least, of their development will be found in their proper order.

Social progress assumes as a starting point a relatively complete development of the motor powers and of those simple motives which are created by intense pleasures and pains. The stages of social progress depend upon the

growing clearness of sensory ideas and the new possibilities of adjustment to the environment which these clearer ideas In the first of these stages—the economic—the search for food is the main cause of mental development. A limited food supply gives a relative advantage to those beings whose sensory powers are so enlarged that they can find sustenance in forms not available to their rivals. The pressure of these economic wants leads, in two ways. to a development of the mental mechanism. One kind of progress depends on the visualization of indirect methods of production. The pressure of a given want makes vivid not merely the means of satisfying it, but also the series of steps through which these means may be acquired. The longer is this series of steps, the greater will be the being's power to acquire food. Viewed objectively tools represent the essence of indirect methods. The manufacture and use of tools. however, demands a mental development in a direction the opposite of that on which the visualization of indirect methods depends. Production is the result of an analytic attitude through which wholes are thought of as aggregates made up of elements. This attitude of mind creates a material concept of the environment with its elements capable of new combinations more suited to supply the wants of men. To escape competition through increased production men must both visualize the means by which production takes place, and analyze into its elements the material used up in production. Economic progress thus depends upon two simple mental powers which could easily become well developed before the appearance of the more complex mental states upon which the later stages of social progress depend.

Economic instincts result from the methods pursued in production. The æsthetic instincts result from the way in which goods are consumed. Æsthetic pleasures are complementary pleasures and depend upon the relations which exist between the goods consumed or between the different

uses to which the same good may be put. The pleasure derived from a group of goods or from the different utilities of the same good is more prolonged and more intense than the pleasure that would flow from these goods or utilities if they were enjoyed in isolation. These group pleasures are more satisfying than isolated pleasures and lie at the basis of æsthetic feelings.

To secure the full development of this second stage of progress the food problem must be solved. A solution may result from conscious processes which create an abundant supply of food, or it may result from some peculiarity of the environment which keeps life down below the limit set by the possibilities of the food supply. The latter condition naturally leads to the earlier development of æsthetic pleasures and is illustrated by those insects whose refined taste has done so much to develop the beautiful forms in plant life. may seem odd to say that these insects do not reach the full possibilities of their food supply, but when an organism passes through several stages of development the limit to its numbers may be in any one of these stages. In the other stages. or in some of them at least, an abundance of food may not in any way tend to increase the number of the species. limitations to the number of butterflies, for example, may not lie in their food. They live at a season when nature is most prolific in its supply of food. Their eggs and larvæ must exist in the less favorable seasons and endure destruction from a variety of causes. If this destruction is very great it will limit so much the number of butterflies that no struggle for food is necessary among them.

Insects select the finest flowers because the food which the flowers offer is more abundant than they need. If food were scarce they would fertilize all flowers, the plain as well as the beautiful. Their æsthetic feelings are the outgrowth of those conditions which permit them to choose the plants giving with the food the most harmonious group of complementary pleasures.

At least a partial relief from the pressure of hunger may be secured by animals whose food supply is irregular. example, when the periods of plenty coincide with the breeding period æsthetic feelings have an opportunity to develop and exercise an influence on the choices which are made. Furthermore, the power to store up fat in the system may be the source of a temporary relief from the incessant gnawings of hunger and thus create a place for other activities. An animal with this power may yield to other motives than the desire for food if his strong feelings are aroused. In these and in many other ways the environment of animals creates the conditions which lead to a more or less complete development of the æsthetic feelings. how simple are the sensory powers on which æsthetic feelings depend. Man, however, is peculiar in that his early environment was markedly deficient in these conditions. To no other animal has the environment afforded so littlerelief from the constant pressure of wants. The food supply of the early man did not expand and contract to the samedegree as that of other animals. There was no dormant state to enable him to escape the evils of winter. pangs of hunger and the fear of enemies were ever present, and thus confined the interest almost wholly to objects in the This state of affairs led to a rapid develeconomic world. opment in the use of indirect methods and to an analytic rather than to a synthetic mental attitude, but it checked to a like degree the growth of æsthetic feelings. The development of these latter was delayed until the sensory powers were so enlarged that personal ornamentation became pleas-But by this time man was ready for a moral evolution, and the requisites for survival were found in this latter field.

In the simple economic and æsthetic stages of progress, the conscious relations are between the organism and certain definite objects in the environment visualized by the sensory powers. Moral feelings depend upon the power to visualize these objects as a whole. The moral man is conscious of an environment in which a variety of objects have definite relations to him and his kind. That conduct is moral that best utilizes all the advantages of the environment. Every moral judgment relates to a place—a group of surrounding objects so intimately related that their best use demands a definite series of choices. In this group time relations occupy a prominent place. Objects and relations endure to a greater or less extent, and the greater the power of a man to visualize time relations the more definite does his moral environment become, and the more readily will feelings grow up which prompt him to make the best use of these relations.

The conscious thought of an environment is an essential element in all moral judgments. When we say, "Put yourself in his place," by "place" we mean the whole of that group of conditions which make up the environment of the man. Such judgments lead up to the thought of a common environment for all men having economic relations. The environments of different men thus blend into a social environment for all men, and its full utilization by society becomes the best means of securing the ends of individuals.

The rise of religious feelings demands of a man not only the power to conceive the environment in which he exists, but also the power to visualize another environment in which existence is possible. A real environment is contrasted with an ideal one. The latter may be only a happy hunting ground for the future, or a Golden Age in the distant past; but in some form the mental mechanism must create a contrast between the present and some other group of conditions before religious feelings can appear. This other environment may be one to which access is desired or one which it is desirable to avoid. Both these types of environments are visualized before the religious motives become prominent.

114 Annals of the American Academy.

In a developed religion the interest of the believer is centred upon the beings which people the ideal environment, yet it is the concept of this other environment that makes this interest possible. Men cannot conceive of good or evil beings with higher powers until the mental mechanism is able to visualize suitable environments for them. therefore, depends on more complex conditions than does morality and should under normal conditions follow and not precede it. Owing to the peculiarities of a pain economy the development of religious feelings has been accelerated, while the earlier stages of progress have been passed through too hurriedly. Living enemies were of so much more importance in a pain economy than a knowledge of the environ ment that the requisites for survival centred around the problems of hostile contact. Under these conditions vivid religious concepts were better safeguards against evils than strong economic motives. The barest scaffolding, so to speak, carried the race through the early stages of progress, and upon this scanty support an elaborate superstructure of religious ideas was constructed. In this manner were overcome the difficulties in the way of early progress, but it was at the expense of later progress. porary scaffolding was a strong support for religion so long as the conditions of the early local environment of society continued, but their decay in the more general environment of modern times leaves religious ideals without adequate support.

The difference between normal and abnormal progress can, perhaps, be best illustrated by contrasting the Hebrew with the Greek civilization. The Hebrew race from its beginning was constantly in the severest kind of a pain economy. It was surrounded by stronger races. The land inhabited had no natural defences, and lay on the highway between the great nations of the east and west. Every movement of these nations was sure to bring to the Hebrews some danger or disaster. They were always in a state of

unstable equilibrium because of their unfavorable environment. The strongest economic, æsthetic or moral bonds could not suffice to hold the nation together under these conditions. Their safety depended upon the clearness with which they conceived of another environment radically different from their own, with a God able to thwart their strongest enemies and to reward His followers for their devotion to His cause. The weakness of man and the need of a powerful protector could not have been better illustrated than in Hebrew history, and all our religious ideas are colored by it.

The Greeks, on the contrary, had a favorable environment. They were by the nature and location of their country protected from enemies. Their excellent climate made them vigorous. Their easy access by sea to other countries, and the abundance of slave labor, gave them wealth and leisure. Therefore, they were not forced through the various stages of progress so rapidly as were the Hebrews. The æsthetic stage of progress had an opportunity to develop in its normal place, and for this reason the art of the Greek has had an influence on subsequent civilizations comparable to that of the religion of the Hebrews.

§ 2. A Greater Humanity.

Although certain religious ideals attained a leading place, the causes which checked full development in other directions have also interfered with the growth of some of the more important religious concepts. The ideals which have been requisites for survival have been clearly grasped; but with them progress has stopped. So few have been the number of religions ideals that they could not have been effective if they had not been supplemented by and blended with the moral ideals which became requisites for survival. The paucity of these race ideals has been due to the conditions of a pain economy. During the early history of the race, there was a life and death struggle between man and

all other animals that were vigorous and intelligent enough to be his rivals. The victory of man in this struggle has been so complete that a great gulf now separates him from the rest of the animal world. It is not likely that this gulf would have been so wide had it not been for the opposition of interests between man and the other animals. It does not seem that there would have been any insurmountable obstacle in the way of an increase in the intelligence of the lower animals, if the more rapid progress of man had not blocked the way. While it is hard to conceive how any other animal could have taken man's place, it is not probable that the growth of intelligence would have ceased if man had been destroyed by some misfortune.

Man's progress has depended only to a slight extent on the rest of the animal world. A few of the lower animals have become beasts of burden, and others have been prized for their flesh but these uses have only tended to exaggerate the differences between man and the animals beneath him. It is no wonder, then, that a sympathy for animals should arise late in human history and even then be too weak to serve as the basis of any race ideals.

During its early history the race was rich in its concepts of beings higher than man. These beings were believed to exist in great numbers and with a great variety of powers which they freely used to aid or to injure man. But for the variety and vividness of these concepts it is not probable that the religious and moral development of the race would have taken place as early nor have been as rapid as it was. The same causes however which confined the intelligent beings on earth to one species, reduced to one person the number of higher beings which men believed to exist. The thought of a single, immaterial God was so essential to the race that all other concepts of higher beings had to be dropped in the struggle to acquire this and give it proper place. So strong has this tendency been to emphasize the unity of God that even the Christ ideal has been retained by

the race with great difficulty. The brotherhood of man and the fatherhood of God were the only ideals to obtain an unquestioned place. Thus man was isolated so far from God on the one hand and the brute creation on the other that no ideals could arise binding him to other creatures by ties of interest and sympathy. He had to rely entirely on his kind for that mastery over nature upon which social progress depends. It is easy to conceive of conditions where this would not have been the case. If some other creature had divided the supremacy with man—each species having some mental and physical powers which were denied the other—social feelings and interests would in the end have united them. Together they could have mastered nature to a degree far beyond the possibilities of either species alone.

Suppose, again, that the several continents had been isolated, and on each of them a species of man had developed as distinct from the other species as birds, for example, differ from one another. Each of them might then have obtained a mastery over nature, in ways beyond the powers of the others. If these species should be brought into contact and should acquire the intelligence needed to act togther, a civilization far richer in its possibilities than that of any single race might have arisen. Magnify as we will the future of man, yet it will be insignificant in comparison with what a society of several distinct species might have accomplished in the same physical environment.

The reduction of all beings to three isolated classes—God, men and brutes—has prevented the growth of religious ideals other than those relating to God. Tasks outside of the power of man to accomplish are delegated to God, as the only being whose power is superior to that of man. A different concept of how to obtain the mastery over nature may be arrived at by assuming a union of intelligent species like man, each having special powers and faculties. Each planet capable of sustaining life has doubtless some characteristics which will give a peculiar development to the

beings who obtain the mastery in it. With the great variety of environments which the universe offers, every possible form of intelligent life somewhere might find an opportunity to develop its full capabilities.

A complete mastery over nature would demand the cooperation of all these forms of intelligent life. Each species could perform tasks beyond the power of its fellow species, and would thus supplement their efforts. The intelligent union of all these efforts under an efficient control of higher beings would give to the united group as permanent a place and as desirable a lot as the laws of nature permit. The length of life and lot of the individuals of each species might vary to an unlimited extent, and yet if common feelings prompted all of them to action, the society could endure and accomplish its mission. Such a society would be a greater humanity in which many of the sentiments, feelings and ideals that are of little use on this planet would have free scope and exert their full force.

This is not the place to discuss the probability or even the possibility of such a society. Whether possible or not, it is an ideal essential to a complete religion, and without it the difference between morality and religion is not clear. Morality covers all the relations of a single species of intelligent beings in one environment. The end of the morality of a given species is the mastery of its environment—the increase of its goods and the diminution of its evils. Moral relations are all reversible. The act which is due from one individual to another, is due in turn to the first individual when the situation of the two individuals is changed. As long as individuals are all of the same species and in the same environment, having the same goods and evils, their relative positions may easily change and their duties to each other be reversed.

Religion, however, is concerned with the relations between different species of beings in different environments. Its end is the mastery of the universe through the united efforts of all

intelligent beings. Its relations are never reversible. goods and evils of the different groups in the religious world are so unlike that obligations can never be paid in kind. Debts cannot even be reckoned in units of utility, nor can the extent of the services demanded of individuals or of groups be measured by any single standard. All the utilities and services of such groups are absolute utilities to the whole society. The absence or inefficiency of any one group would render useless the united efforts of the other groups. The feelings which bind these dissimilar groups together and make individuals subordinate themselves and their group to the common ends of the whole society are the only ones that, strictly speaking, are religious. If the efforts of a species are not carried beyond the mastery of their own environment, they do not rise above the moral stage of progress. They must submerge themselves in a greater humanity to reach the religious stage. If the race remains dissatisfied with the limitations of its present environment. this ideal has still to acquire a prominent place among the race ideals. Our sensory powers are now too much developed to permit us to hope that the great race ideals can be realized upon this planet or by our race in isolation. The hope of their realization may be kept alive only by the thought that there is a greater humanity working together for the mastery of nature.

§ 3. The Race Ideals.

Race ideals are the highest type of social forces. As projected and visualized by the mental mechanism they serve to steady the choices of individuals in a general environment, where the influence of nature is too indirect to determine effectively the actions of men. In a local environment objective conditions are stern realities which so hem in man that his alternatives in matters of conduct are few and do not relate to questions of vital importance. When, however, many local environments blend into one general

environment, and the race has a whole planet to which to adjust itself, objective conditions lose that direct control over human activities which they possessed when the adjustment was only to the conditions of one locality. New motives must now be aroused which will dominate men as fully as did the old conditions.

The ideals of a race represent its aspirations rather than its knowledge. They may be said to be possibilities so visualized that they rank higher than realities. To make visualization possible an ideal must be made up of a group of clear ideas; it must also be composed of vivid ideas or it cannot influence the choices of men. Where clearness and vividness are combined, motives are created stronger than knowledge or passion can produce. In a general environment knowledge is clear, but lacks in vividness. Passion is vivid, but its lack of harmony with the new conditions brings it into opposition to present welfare, and thus weakens its force.

The growth of the sensory powers modifies the ideals of a race by enlarging the sum of its knowledge, and thus changing the area of its possibilities. Some of the old possibilities now become matters of demonstration, while others of them are changed into impossibilities. But the additional knowledge opens up a new area of the possible, and thus allows the creation of a new group of ideals which have even greater clearness and vividness than those of the former epoch.

The older race ideals have grown out of the conditions of a pain economy, which for so long a time determined the direction of social progress. The dangers from living enemies turned men's attention from the material aspects of their environment and led them to seek in other beings more powerful than their enemies a protection from pain and destruction. Out of these conditions many forms of theistic religion grew up and formed the bulwark of a progressive movement in society. The ontological ideals are

best expressed by the terms God, free-will and immortality. God is thought of as the creator of man and of the universe, and hence has the power to ward off evils and to protect from enemies. The thought of a free will contains the concept of the relations between motives and acts by which the responsibility for bad acts rests with the actor and not with his creator. Man, and not God, is responsible for the evil in the world. Immortality implies an indestructibility of the soul, or essence of man, and the possibility of an existence in another world from which his enemies are excluded.

The words in which these ideals are formulated mean little unless they cause a picture of the universe and the relations of the beings in it to be visualized and projected as realities. There is a unity to the scheme and a background of related ideas each of which is essential to the whole. The concept of nature and natural law which this picture contains is simple, yet it is as perfect as the sensory powers of man at that time were able to furnish.

The transition of society from a pain to a pleasure economy and the accompanying enlargement of the sensory powers of man have done much to mar the picture of the universe which our ancestors had. With clearer ideas of nature, the simple pictures of earlier men naturally become inadequate for present needs. When the increased analytic powers of men have resolved the material universe into atoms, the act of creation becomes a difficult conception. It may still be thought of as a fact, but it cannot be pictured in the simple manner of earlier times. When the same sensory powers seem to demonstrate a law of universal causation, it is difficult to visualize a concept of man's nature that will admit of his acts being an exception to the general rule. When man discovers that he is an organism made up of material parts, it is hard to see how indestructibility can be one of his qualities.

I do not mean to imply that there is not a satisfactory proof for each of these ontological doctrines. I merely

desire to call attention to the fact that they cease to be social ideals when they become theses needing proof. We never ask proof for ideals that we can readily visualize. The process of visualization of itself makes an ideal vivid, and vividness creates belief and generates activities in harmony with the ideal. Clear proofs without a visualization may be striking, but they are not belief-making, and hence do not influence the activities of men in social relations.

There is another defect in the belief-making power of these doctrines. The proofs rest not on direct evidence. but on the failure of other concepts of the universe to explain all the known facts. However convincing these indirect proofs may be, at best they leave men without any picture of the act of creation, of the mechanism of a free will, or of how an organism can be indestructible. Not only does the Creator in this way become a Great Unknown, but also the essence of man is pushed back into a realm into which the sensory powers cannot reach. Such concepts lack the clearness and vividness which social ideals must have. They will still influence individuals, but they cannot become social forces. Progress depends on the beliefs and ideals of men, and not on mere knowledge. Clear ideas must be made vivid by visualization to become effective forces in determining conduct.

The ideals of a pleasure economy must be safeguards against the evils of the new environment in which the enlarged sensory powers of men have placed them. The old evils were external and demanded, as a remedy, a powerful protector and peculiar views of the universe and of man's nature. The new evils are subjective and have their causes, not in the nature of man or of the universe, but in the defective relations which exist between men or between man and nature. They are evils of adjustment which no change in the ultimate forms of the universe or of man can alter. The remedy lies in the creation of ideals which will lift men above temptation and inspire them with a desire for

an increased mastery over nature. For men tempted by many degrading pleasures the highest religious ideal is a character capable of resisting evil and able to exemplify the mastery over nature which intelligence exerts. The Christ ideal has both these elements. The thought of an Incarnation does not, like an act of creation, contain ideas difficult to visualize. It expresses simply the relations existing between higher and lower forms of life and the interest and sympathy which the higher has in the lower. It predicates a mastery over nature, but in a way that involves no necessary violation of natural law.

The increased vividness of religious concepts after the introduction of Christianity shows in this respect the superiority of the Christ ideal over the older concepts of deity. The Gods of the earlier religions were powerful beings,—the creators of the world, the source of blessings and the protectors from evils; yet the growth of the sensory powers of men in the early civilizations soon weakened the power to visualize these concepts and thus produced a decay of religion. Even at their best they were no safeguards against the degrading pleasures which the new civilizations brought. Christ ideal supplied these defects and made it again possible for men to visualize the relations between themselves and higher beings. The use that art has made of the story of Christ also shows how easy it is to visualize the concepts of the new religion. God as creator cannot be pictured to men of enlarged sensory power. Nor can manifestations of superior power be made visual. The lightning, the storm, the earthquake, the pestilence, and similar events seem to civilized men to be mere manifestations of natural force and bring to them no higher thought. Christian art, therefore, must confine itself to representations of scenes within the field of human activities and strive through them to create ideals of higher forms of life. Its success in this respect shows the harmony between the Christian ideals and the present sensory powers of men.

The thought of an Incarnation is the highest ideal of the new economy, but it must be supplemented by others. The belief in the mastery of nature by intelligence will be one, and faith in a greater humanity another. One is the end of all social activity, the other is the means by which the end is secured. When these three ideals are made prominent by the new conditions, they will give a renewed vitality to religion, making it again the great social force.

In our present civilization clear and well-defined æsthetic ideals are wanting. On the basis of the meagre data we now possess, it would be difficult to predict the form these ideals assume in a pleasure economy. I have called attention already to the causes which prevented the growth of æsthetic feelings at the time when their appearance was most demanded. The social forces at present are much weaker than they would have been if progress had been normal and had created a group of æsthetic ideals to supplement our present moral and religious ideals. This gap left by the social forces we endeavor to fill up through reasoning. By long series of deductions, based upon economic facts. we seek to supply motives for conduct which would have come directly from ideals in the æsthetic field. The importance and extent of the area of conduct, controlled by utilitarian motives, results from this defect. Many of the acts now determined through a pleasure-pain calculus would have been controlled by æsthetic ideals.

These ideals if fully developed would also have modified and strengthened our religious concepts. Here, too, we now resort to reasoning in order to escape the difficulties growing out of our analytic attitude. We seek to prove the existence of a Great Unknown hidden from view by a material concept of the universe, when a more synthetic attitude due to æsthetic ideals would have made the concept of God a vivid reality. In a pleasure economy men would have risen to the thought of God and heaven, not as manifestations of power, but as the perfection of beauty and grandeur. They

would have felt the need of a God, not so much to begin, as to complete the universe. In this way the concept of God, which has been weakened through the transition from a pain to a pleasure economy, would have retained its vividness.

The evils of a pleasure economy have also modified the moral ideals. The old concepts of a free will and immortality demand a view of the essence of man that cannot now be readily visualized. This essence may be indestructible, and outside of the reign of law when isolated from bodily relations, but the evils of a pleasure economy lie in these bodily relations. Moral ideals which do not lead to a higher life under existing planetary conditions have little present value. The end of morality is the best utilization of the present environment, all of whose relations are destructible and subject to law. Vivid moral ideals must be based on these conditions and tend toward a realization of the highest form of life they allow.

This utilization of present conditions is beyond the power of the individual man, and hence moral ideals must assume a social form. These ideals must picture men in those social relations through which they acquire a mastery over nature and over the temptations which the conquest of nature brings. There are three moral ideals which comply with these conditions: social solidarity, social responsibility and social immortality. Social solidarity is a feeling that progress demands the united efforts of all the members of a society. Social responsibility affirms that every individual is responsible for the failure to secure progress, and that this responsibility cannot be avoided; it is not reduced, but rather increased by the failure of others to do their part. Social immortality implies more than an endless life. must be a desirable immortality and involves an existence in a social environment. Such an immortality depends on the acts, and not on the essence of man. However permanent the essence of man may be he cannot of himself create the social relations which would make an endless life enjoyable. He must depend upon the good-will of his fellows or superiors for admission to the social circle, and this goodwill he must earn by his acts.

The thought of a social immortality contains no picture of man's essence. The emphasis is placed on the environment to be secured and on the conditions demanded for entrance. Nor does the ideal demand an endless life for all members of a society. If the race is to endure, or if it is to be an essential factor in the prosperity of a greater humanity which has so mastered nature as to ensure its continuance, the ideal will still be a force determining the activities of individuals. Self-sacrifice is an essential element in all social progress, and will steadily increase so long as it does not thwart the end for which it exists.

If this view be correct the transition from a pain to a pleasure economy involves important modifications in the ideals of the race. But these changes are not of such a character as to cause a break in the development of our religious and moral ideas. The new ideals are already a part of our subjective environment and stand out with more or less clearness. The change will result in a transference of emphasis from the old to the new ideals. The more deeply the race becomes immersed in a pleasure economy the more prominent will the new ideals become, and the less urgent the need for extraneous proof, since requisites for survival get their proof out of the conditions which bring them into existence.

§ 4. The Misapplication of General Principles.

In the foregoing discussion the social forces have been analyzed into their elements, and their order of development and their relations to one another have been pointed out. An abstract method has been followed to reveal the working of these forces in their freest form. As regards problems of immediate interest, however, they do not have free

scope, but appear in various complicated forms and have their action restricted and obscured by the peculiarities of our planet. This fact causes many wrong deductions to be made from general principles, which must be rectified by further discussion.

A large part of these wrong inferences is the result of confounding the problems of human society with those of general society. If the ideal of a mastery over nature is realized it must be due to the activity of a greater humanity working under less restricted conditions than this planet affords. Our sensory powers are now too far advanced to accept the ideal of a paradise on earth. Human society cannot, therefore, undertake so large a task, but must limit itself to a much less ambitious scheme. It has a definitely limited series of environments to operate in, and must have for its end the evolution of a single species of beings—the one best fitted for our planetary conditions. The more fully human society limits itself to this end, the more probable is it that the race can be an effective aid to that greater humanity of which it hopes to become a part.

The laws of human progress are not, therefore, the general laws of social progress. A greater humanity, to attain its ends, must differentiate into as many species as possible and bind them together into a harmonious whole working for common ends. Human society must, however, integrate and narrow itself down to one type of a man. There must be a continuous struggle between these types, some of which must constantly displace others.

However inspiring may be the ideal of intelligent cooperation among different species on this planet, the struggle of a pain economy has been carried too far to make its realization possible. The gap between man and other species is now too wide to bridge, and the differences between the races at the present time are not great enough to make a permanent union desirable. The better race finds it advantageous to displace other races, while the weaker races yield too readily to the temptations which contact with a higher race brings. The permanent co-operation of distinct races is possible only when each race has its habits, customs and ideals so firmly set that they will not be weakened or destroyed by contact with other races. If all of the races give up some of their peculiarities, they will finally blend into one race. The consumption, habits, pleasures and temptations of the present races are too nearly alike to permit a co-operation without an integration. They must, therefore, stand in hostile relations to each other or finally unite.

It will greatly simplify the study of human society if we remember that our planet can furnish but a single series of environments in which there is, at each epoch, room for only one dominant race. The local environments were at least numerous enough to start a great variety of organisms, but as the conditions of life became more general, the number of progressive species was rapidly reduced, until one dominant species was formed in an environment so general as to exclude all others. The study of these displaced races and species throws light on the problems of a greater humanity, but this knowledge is of little value in a study of human progress. If the planet furnished a number of parallel series of environments, each portion of the race might have found a suitable series for its continuous progress until they were all brought into harmonious relations. But then the earth would have created a greater humanity and not a human society like the present one. Even if a greater humanity had been founded there would have been in the development of each part a series of problems like those of human society. Each species must tend toward a single type by means similar to those which now cause human progress.

If this view is correct the general problems of society are out of our reach except in some of their religious aspects. The inductive data upon which to build a general social science are very limited. The science of human progress

must remain a study of the dominant race in its most favorable environment. It is largely the static part of a complete social science. The planetary conditions which limit progress are static, and the goal of progress is a static type of man fitted for the earth's best environment. A study with these limitations cannot rank with biology and psychology in the hierarchy of the sciences. For this general social science we need the data of many plauets in which other civironments have made other types of society possible. The organisms on our planet might perhaps have developed in any direction in which it is possible for organisms to develop, and the possibilities of the mental mechanisms of these organisms are perhaps as great as nature permits. We have, therefore, the data for the general sciences of biology and psychology. But the lack of an unlimited number of possible environments prevents a study of the general laws of society on an inductive basis. We do not have the parallel development of different species in social relations in the way that the lower organisms have developed in adjacent environments. The different races of men do not furnish the basis of a comparative study except in an early stage of a pain economy when religious motives were dominant. This period can help us much in the study of a greater humanity, but it throws little light on other than religious problems. Normal social progress came at so late a period that there is but one advanced society in which to study it. In every part of the civilized world a single type of man either has acquired or is acquiring a dominant place.

The emphasis of the organic analogies in society is also the outcome of a misconception of the province of human society. The problems of a greater humanity are confused with those of human society. The mastery of nature—the ideal of a greater humanity—demands the co-operation of a great many species, each of which has a special work to perform. This greater society might with some justice be called an organism. Each species might have as distinct a

function as that of the organs of a human body. There would also be the same subordination of lower species to the higher that is characteristic of real organisms. The tendencies of a human society, however, are in an opposite direction. Its end is the creation of a single species with its individuals having the same qualities. They must be alike and have the mobility and capacity needed to take any place in the society. No individual or group can become their head in the way that some person or species must become the head of the greater humanity. Human society must tend toward a mobile democracy.

So long as the different races could maintain their peculiarities in adjacent local environments and their members were too immobile to migrate to distant lands, many organic relations grew up between them. The blending of these environments into one general environment has checked the growth of these organic tendencies and has given increased vigor to democratic ideals. The immobility, inequality, and subordination among individuals are reduced, and all acquire the same habits, customs, rights and duties

In new societies where many races are brought into economic relations there is at first a tendency to form social strata, each of which performs an organic function for society. This tendency is however only temporary. The differences in these races are not marked enough to enable each of them to maintain those habits, ideas and pleasures upon which the permanence of their type depends. A single environment cannot afford the basis for different groups of habits, customs and pleasures. There will in such cases be strong tendencies toward a social degeneration until those habits and pleasures out of harmony with the new conditions are discarded, and then the society will integrate into some single type more capable than any other of utilizing all the surrounding advantages. The study of the organic tendencies in new societies thus tends to create

a wrong concept of human progress and to confuse its problems with those of a greater humanity.

A similar error is due to a wrong application of some of our religious ideals. When in early times our religious ideals took their rise, a narrow concept of the universe made it appear as if this planet were co-extensive with the universe and as if all God's creatures were inhabitants of The religious concepts of a greater humanity were thus applied to the human races. They were to be bound into an organic unity by religious ties, to live side by side in harmony, and to work together for the common interests of men and for the glory of God. assumed that there is a place for each race and that it can be of some use in furthering the interests of the united whole. The Chinaman, the Turk, the Malay, the Bushman and the Digger Indian must be preserved and made integral parts of the whole. Earnest efforts to this end are therefore demanded of all who desire the welfare of the race.

Broader concepts of religious problems and the recognition of the subordinate part which life on this planet must play in the realization of religious ideals, should make evident the fallacy of such arguments. If each of these races were on a different planet, with conditions favorable for the development of a distinct type of man, their preservation and elevation would contribute to the common ends of a greater humanity. But when all these races are thrown together in a single environment, it is not possible for the peculiarities of each race so to develop as to make it a definite type capable of rendering a distinct service in the cause of the greater humanity. When the Chinese or the Indians are admitted into a higher civilization, they do not compel progress either for it or for themselves. They tend to break down not only the habits which made them useful parts of their own civilization, but also those habits and ideals of the higher civilization upon which its future progress depends. The earth has but one general environment and can bring to perfection but one type of man. Attempts to preserve lower types of men, or to bring them into organic relations with higher types, tend to make a society static and thus check its progress. They may even result in social degeneration through the introduction of new temptations, vices and crimes.

Ethical discussions also show the same tendency to confuse the problems of a greater humanity with those of human society. It is stated, for example, by Herbert Spencer that the ideal of moral life is a life without pain. The gradual adjustment of man to nature, it is thought, will finally lead to such an arrangement that a life of unalloyed pleasure can be secured by every person. The complete mastery of nature which such a picture presents is indeed an ideal of social progress, but it is not necessarily the ideal of human progress. A greater humanity can obtain for some of its members a complete freedom from pain. secure this end an extensive and varied series of environments must be found in which a steady development can take place. The earth, however, has no series of environments so complete as to allow such a development. it probable that a single species of men in any environment could live so as to secure a complete freedom from pain. The co-operation of many species in a greater humanity could come much nearer the desired ideal. But even then it is not probable that an exemption from pain could be secured for more than a part of the whole society. If each species has special tasks to perform in order to maintain a mastery over nature, it is improbable that many of them can do their work under conditions where pain can be avoided. The selfsacrifice of many of the species would be demanded to place the favored few in a state of unalloyed bliss.

Our moral ideas should harmonize with the conditions under which men must live on this planet and with the type of man which these conditions tend to create. No other morality can promote the development of human society along its normal course. We must accept the limitations imposed by this planet and reject ideals which do not tend to produce men capable of enduring evils which result from them.

§ 5. The Civic Instincts.

If the difference between human progress and that of the greater humanity has now been made clear, it will be possible to take up some of the more concrete problems and to show the forms in which the social forces appear in them. All of the problems of a greater humanity—at least all of them about which we have any inductive data—are religious. All other social problems are civic. They include everything relating to the preservation and perfection of the best type of man for the one general environment that our planet offers. There are no elementary civic forces. All the forces are moral, æsthetic and economic combined and blended in many complex forms to meet the peculiar conditions demanded by human progress.

The civic forces are made up mainly of three elements, civic customs, civic ideals and civic instincts. Of these the civic customs belong in a class by themselves because they are so largely due to the conditions of a pain economy. Customs are the means by which the aggressive instincts of hostile individuals are restrained and peace is preserved. They set up definite rules of action to prevent conflict. Our legal system and the principles of parliamentary government are the best instances of the power of civic customs. They show themselves, however, in the small as well as in the great affairs of life and prevent a return to the conditions of a pain economy with its conflicts and disorders.

The civic ideals, or, to use a more familiar term, the democratic ideals, are the enduring elements of human progress. They are the surviving concepts of a long series of subjective environments. They stand out more clearly after each transition from environment to environment. Each change breaks down some of the feelings, tendencies and ideas due

to past conditions and strips others of peculiarities due to local conditions. The residue becomes more vivid with each change, and gradually crystallizes into ideals. These ideals represent the goal of human progress—a condition where man's mastery over nature is complete. They become a social force by picturing an ideal society and inspiring a desire to make it real.

Civic instincts develop from conditions more local and less permanent than the civic ideals. They are the effects of a single environment and change as it changes. Ideals engender a love for the objects associated with them. A civic instinct, however, represents a reaction against something; some particular group of conditions arouses an aggressive activity. These conditions are always local. A race could not, for example, have an instinct against food, but it might have an instinct against eating frogs or rats.

Civic instincts are created by the standards of life of each society, and are a feeling of antipathy against the objects or persons who violate them. Standards of life are always relative; they represent the possible in the present environment. Each new environment creates new possibilities and thus modifies the standards which society can set for its citizens. A standard represents the acts of the better class of men and thus implies that there are some who do not live up to it. Some persons or acts must be excluded and against them the civic instincts are directed and exert their force.

The civic standards are the outcome of concrete economic, æsthetic and moral conditions. There are as many of them as there are distinct groups of these conditions having a direct bearing on human welfare. In production we find standards of thrift, frugality, promptness, regularity and trustworthiness. In commerce and trade there are standards of commercial honor, honesty, truthfulness, fair dealing and honest wares. In consumption there are standards of comfort, food, clothing, home life and privacy. In the realm of æsthetics there are standards of cleanliness, neatness,

harmony and beauty. In morals there are standards of chastity, fairness, uprightness, consistency and temperance.

A host of similar civic standards might be named each of which is formed and modified by certain peculiarities of the present environment. Such standards are high when they demand all that is possible at the present time. They are low when a lax public sentiment allows the continuance of acts which do not harmonize with public interests. The firmness and height of the standards depend upon the strength of the civic instincts which resent their violation. There is no standard unless there are feelings antagonistic to the acts and persons which sink below it. A mere admiration of certain acts or a desire to be virtuous for its own sake or for its direct advantages, may have an influence on individuals, but cannot become a social force inspiring all persons living in a common environment.

The love of thrift, for example, may create a class of thrifty persons in a community, but it is a dislike of the thriftless that makes the standard of thrift for society and forces every one to live up to it. The height of the standard depends not on the love of thrift, but on the dislike of the thriftless. The standard of fair dealing and of honest wares depends not on what individuals do or make, but on what they dislike to see done or made. The standard of eleanliness or of neatness depends upon the feelings we have about the lax appearance of other persons. The standard of harmony and beauty depends upon what we insist on excluding from our presence, and not on the degree of our feelings for what we love. The standard of commercial honor depends not on what we will do or not do, but on the acts which will cause us to refuse to deal with other persons if they do them. The standard of national honor or credit depends not en our love for the nation, but on the feeling of antagonism against those who sacrifice its interests. The standard of living depends not on what persons eat and drink themselves, but on what they dislike to see other persons eat or drink. Shoes are not made a part of the standard of life by our wearing them ourselves, but by our ostracism of persons who go barefooted. The standard of wages depends on what we object to other persons working for, not on what we refuse to work for ourselves.

A mere love of certain objects or conditions can never make a standard. The civic instincts act in the subjective environment just as do the objective conditions which become requisites for survival. When survival depends on objective conditions, those who cannot master these conditions perish. The lowest level of intelligence and organic efficiency is set by these conditions and the surviving types must be above this level. When social co-operation becomes a requisite for survival those persons against whom the civic instincts are aroused cannot remain a part of society. They must depend on their own exertions and these efforts are not sufficient to enable them to compete with those who are efficient parts of a society. They are therefore pushed into such unfavorable conditions that they, or at least their descendants, cannot live.

The civic instincts thus determine what standards shall be requisites for survival and what shall be the height of these standards. They divide the members of each community into parts, giving increased advantages to the social, and shutting out the unsocial from direct contact with nature and natural resources. If the civic standards are high, many fail who could succeed if allowed direct contact with the better natural resources. Society so monopolizes these better resources for its members that isolated or less social individuals, boycotted by the civic instincts, must seek a poorer environment than that which they could secure under more primitive conditions. The less social are, therefore, gradually eliminated from society, and the surviving elements become more united and homogenous. The higher the civic standards are, the fewer are the types of men who can survive, and the more pronounced are their social qualities.

Under these conditions civic instincts become the dynamic forces in society because they are the type-producing forces. They keep society divided into two parts with the advantages so plainly on the one side that the other fails to survive. When certain of the lower types of men are eliminated by this process new civic instincts appear or the old ones grow stronger, and then a new division is created in society by which the less favored types of men are again forced to the wall.

In a pain economy the struggles were mainly between independent nations or between semi-independent classes in one nation. When a nation or class acquired so dominant a place as to encounter no further opposition, progress ceased. There were no means by which a further elimination of the unfit could be carried on. Temptations, diseases and vices are as apt to carry off those fit to survive as those who are unfit. The goal of a civilization based on a pain economy is reached when a dominant nation or class is produced, or when the antagonism between nations or classes dies out. There are then no forces tending to create a higher type of man.

The civic instincts creating the higher standards of life in a pleasure economy replace the national and class hostilities of earlier civilizations. They increase the opposition between the different types of men and give to men with a high standard of life that advantage which the dominant nation or class had in former times. The intensity of this antagonism determines the standard of citizenship. The citizen of the future must be more than a mere inhabitant of a region enjoying its advantages. He must be an independent, self-supporting man with civic standards so high and numerous as to arouse the admiration of his fellows. Those whose standards are so low as to excite the civic instincts of society against them cannot remain an integral part of society and do not deserve the rights of citizenship. Every one must either have the civic standards needed for

citizenship or become so isolated from social life and cut off from its advantages that he will sink into the dependent classes. Citizens and the dependent classes stand opposed to each other in an advanced society. Progress depends on the sharpness of the lines which separate them.

§ 6. The Democratic Ideals.

The preceding discussion has made clear the goal toward which human progress may tend. A planet with a singlegeneral environment can bring to perfection but one type of This type must be developed through repeated differentiations followed by the displacement of the less. favored types. The dynamic forces in human progress, therefore, are not the same as those in the progress of a greater humanity. This more general society tends to differentiate its members into separate species and then tobring them into co-operation for common ends. There is not in such an ideal that opposition of interests which the progress of a planetary society demands. In a human society the dominant race or class cannot share its advantages with its rivals without a retardation of progress and if this tendency is strong enough to enable every class to hold. its own, social stagnation would result.

I do not mean, however, to assert that the struggle between the dominant and the less favored classes must continue in those primitive forms of a pain economy where the lives and liberties of the contestants are at stake. In the pleasure economy toward which we are tending, it is not probable that any of the traditional natural rights of men will be violated. The power to survive will be determined mainly by the industrial instincts which produce wealth or by social instincts which tend to reduce temptation and to limit the inclination to indulge in intense pleasures.

Under these conditions there would not be that strugglebetween rival races and classes which takes place in a pain economy. The many local environments have each

developed a peculiar race or class. When these are thrown together in a general environment the power to survive is determined by a crude appeal to objective conditions. pleasure economy it is assumed that this struggle of rival races and classes is finished. A single society has been formed with moral and religious forces strong enough to keep the peace and to allow the tendencies of a pleasure economy to show themselves. The weaker portion of society suffers, not from the oppression of the dominant classes, but from the misery, diseases, temptations, and vice which their lack of industrial and moral qualities permits. Instead of the old struggles between independent classes the opposition of interests now lies between society and the dependent classes. No person can rightly be a member of a society unless he not only is self-supporting but also contributes in some way to the welfare of others. The surplus earner makes society, the surplus consumers are the dependent classes. These dependent classes cannot survive unless society allows them to share in advantages which they do not create. The number and welfare of dependent persons depend upon the relative strength of two groups of social feelings. The one group would prompt the self-supporting members to increase their industrial efficiency and to guard themselves by isolation from the crude pleasures. temptations and vices of the less developed portion of society. The other group would prompt them to share their advantages with the dependent classes and thus to promote equality among men and prevent further differentiation.

In modern nations, and especially in a pleasure economy, the strong feelings tending to help the dependent classes are due to democratic ideals. The older ideals of this group are justice, liberty, equality and fraternity. To them may be added tendencies toward the referendum, the initiative, and proportional representation in the sphere of government, and in the economic world such ideals as a

living wage, surplus values, progressive taxation, the single tax and the right to live, to work and to enjoy the fruits of the earth. These ideals picture society as it may be in its final environment, with the mastery of nature a completed task, and thus they assume a much higher state of civilization than we actually possess.

There is no field in which the tendencies away from a pain economy show themselves more clearly than in these democratic ideals. They might with truth be called the first fruits of a pleasure economy. They practically assume a life of unalloyed pleasure by shutting out from view the pains and suffering which a high civilization on our planet involves. They represent the economic world as a garden of Eden in which the gifts of nature are the most prominent element. Even when labor is emphasized as the sole cause of value, this labor is pictured as being so generously supplemented by natural forces that it would become a pleasant recreation if every one did his part. The difficulties of production are lost sight of in the struggle over the distribution of the bounties of nature, and thus the obstacles to progress seem to lie in the latter and not in the former class of The recent discussions of land tenures illustrate problems. these tendencies. The land is represented by many writers as the great source of wealth and its products as gifts of nature to man. Each man is thought to have a right to an equal share of this bounty, and the laws and customs which countenance any other disposition of it, are regarded as infringements upon natural rights. The rent of land thus becomes a social surplus of such a magnitude that when justly distributed the labor of men can be so reduced in time and in irksomeness as to eliminate its most disagreeable features.

While the picture of the environment presented by these ideals belongs to an advanced pleasure economy, there is one prominent element in them which belongs to a pain economy. The evils and pains of life are represented as coming, not

from the environment or from the defects of human nature, but from men. The strong and successful are pictured as being in a never-ending conspiracy to defraud the weaker and less successful. The oppression of the dominant classes and their grasping nature are made vivid in a thousand ways by those who represent popular movements.

Democratic ideals thus rest upon two prominent thoughts, the gifts of nature and the oppression of men. In emphasizing the gifts of nature the environment of the distant future is pictured, when the mastery over nature will be complete. In visualizing the oppression of men the distant past is pictured, when the conditions of a pain economy were supreme. These ideals thus combine a prophecy of the future with a history of the past. The historical man of the distant past is put without change into the best environment of the distant future. The obstacles to progress thus seem to come from the dominant classes who prevent an equal distribution of the gifts of nature. There is a silence as to pains and the obstacles to progress which come from the environment and represent the cost of nature's bounties.

Such pictures of nature and of men have been the inspiration of the leaders of democratic movements designed to free society from control of its dominant classes. were especially vivid at the time of the French Revolution and are presented with fresh vigor in recent discussions. The ideals of Godwin which aroused the opposition of Malthus are similar to those of Henry George in his discussion of the land problem. Some of Godwin's ideals, like that of human immortality on earth, have been rendered impossible by the growth of knowledge, but the gap thus opened has been filled in by the increased vigor and clearness with which the idea of the social surplus can now be presented. Man cannot live so long in nature's best environment as Godwin supposed, but its increased beauties as pictured by George compensate for this defect. These writers emphasize the oppression of the ruling classes and have the same belief that the pains, misery and vice of the less favored classes are due to this cause. A humanity freed from oppression could, it is thought, escape from these evils and create a society in which the gifts of nature would be abundant enough to supply every want. The conception of both writers is the same as that of every reformer who would rouse men to activity by a presentation of past oppression and future welfare.

These democratic ideals are the static elements of a pleasure economy, for they hinder further differentiation and tend to keep in society all the classes it now contains. They retard the displacement of the less efficient classes and restrict the activity of the more efficient. They prevent the integration of society and the development of the type of men most fitted for the earth's best environment.

In the normal progress of a greater humanity all the social forces are dynamic. They become static only when abnormal conditions disturb the orderly progress of society. In human society the struggles caused by the conditions of a pain economy gave to the religious and democratic ideals great strength and clearness. They were the means by which race and class antagonisms were so reduced as to make a unified society possible. The evils of a pleasure economy, however, demand in addition to these ideals higher standards of life and stronger civic instincts. These standards and instincts depend upon the peculiar conditions of the new environment and could not grow until society entered a pleasure economy. They are therefore at the present time much weaker than the democratic ideals with which they stand in opposition. The civic instincts direct the attention to the evils of the present environment and demand a relief from them. The democratic ideals make vivid a future environment, and oppose any activities not in harmony with its conditions. They create sentiments opposed to the typeproducing tendencies needed for the development of the man best fitted for the present conditions.

These ideals at the present time seem to have an irresistible force, yet it must be remembered that they now have their maximum strength, while the civic instincts, from which other tendencies will spring, are only in their infancy. The civic instincts, however, are not inactive and are gradually establishing standards which must in time so separate the citizens from the dependent classes that steady progress will be possible. Even in America, where democratic ideals have had undisputed sway, each class or section of the nation is becoming conscious of an opposition between its standards and the activities and tendencies of some less developed class. The South has its negro, the city has its slums, organized labor has its "scab" workman, and the temperance movement has its drunkard and saloon-keeper. friends of American institutions fear the ignorant immigrant, and the workingman dislikes the Chinese. is beginning to differentiate those with proper qualifications for citizenship from some class or classes which he wishes to restrain or to exclude from society. The lines between citizens and the dependent classes are not yet clearly or properly drawn, yet as now drawn they indicate the manner in which the growing civic instincts will act. A new era of our development will begin when these instincts are strong enough to remodel public opinion. It will mark the beginning of a social integration through which a truly American society can be formed.

§ 7. The Progress of Cities.

The transition to a pleasure economy modifies our civilization in no way more strikingly than in the changes it causes in the relative positions of country and city life. Under the old conditions country people were looked upon as the mainstay of morality, purity and industry, while city life was regarded as a cesspool of pollution, corruption and vice. The historical accounts of most nations start when the people were mainly engaged in agriculture and were thus pure,

free and vigorous. The history is then followed through the various stages of progress until wealth, power and influence are to a large extent concentrated in a few cities. As this latter period, when the nation is sinking into decay, coincides with the period of city dominance, it is assumed that city life is the source of corruption and decay, just as country life was at the beginning the source of vigor and purity. Such accounts fail to tell how this pure country life originated or why city life is necessarily corrupt. They simply take as an arbitrary starting point the time when country life is at its best and follow out the history of the nation until it is conquered or absorbed by some more vigorous nation.

The difference between the possibilities of city and country life lies largely in the different kinds of environment they afford. The country is a series of local environments, each of which affords the conditions for the development of a particular type of man. So long as the people in them are isolated from other people, these local environments force a sharp adjustment to their peculiarities and thus bring into prominence certain moral, civic and industrial qualities needed for their best utilization. Social beginnings are easily made under these conditions, but they cannot be carried far. Commerce, trade and intercourse with adjacent nations break down this accurate adjustment to local surroundings without supplying the conditions for further progress. These corrupting influences soon bring the nation into a static condition and render it weaker than its aggressive neighbors.

The country has many good local environments, but no general environment. Cities, on the contrary, have no local environments in which social beginnings can be made or peculiar moral or industrial qualities preserved. They furnish, however, a general environment in which alone a continuous progress is possible. It is difficult to start a civilization in cities, but it is impossible to continue one for any length of time outside of them. It is necessary to transfer to cities the civilization begun in the country, and this

transference usually takes place when the nation is exchanging the conditions of a pain for those of a pleasure economy. The evils of the two periods of transition are thus combined and coupled with other evils, due to the fact that adjacent nations remaining in a pain economy are ready to plunder and destroy the new civilization as soon as progress weakens its power of defence. It is no wonder, therefore, that city civilizations have come to grief and that many false generalizations have been based on these failures. Only after a long period has elapsed and the evils and difficulties with which city civilizations have to contend have been eliminated, can there be any hope that the permanent conditions of progress will be secured. Some of these conditions are so obvious that it is possible to discuss them even before city life becomes a dominant element in modern civilization.

In the first place city progress demands an environment so general that no marked outside influence can disturb its progress. The forces shaping any civilization must be internal and a single environment must endure long enough to allow the proper industrial qualities and civic instincts to The new city civilizations need isolation from outside influences as much as did the early country civilizations: but this isolation is secured by having so general an environment that the whole world is included in it. So long as city life is disturbed by the irregular intrusion of external forces, by the influx of people hitherto outside of its influence, or by temptations, vices or diseases generated by other conditions, it must be so hampered in its development that normal progress is prevented or, at least, greatly delayed. these evils may be withstood and remedied if their sources are internal so that a process of gradual adjustment is possi-It is the sudden intrusion of external factors, or of those not subject to proper control, that interferes with the conditions of normal progress and makes city life static or even retrogressive.

These evils are also aggravated by the civic instincts

which the inhabitants of cities have inherited from earlier country conditions. Instincts should always be the outgrowth of present conditions. The people in a new environment can with advantage inherit the ideals of their ancestors, for these ideals represent the general features of past environments. Even these ideals must often be modified and made more general that their vividness may be retained. Civic instincts, however, must be local. They are the changeable part of the subjective environment and are worse than useless unless they correspond closely to the definite and prominent features of the present epoch.

Few, if any, people in cities are free from the instincts due The influx of people from the country to country life. is so constant and the contact with the country so easy that the ideals of country life remain vivid and city life is forced to become an imperfect imitation of country civiliza-Cities are governed as if they were a group of country villages. The hierarchy of officials, their relations and duties, are based on the needs of country life. City people still want houses with grass plots in front, cellars underneath and dumping grounds for rubbish behind. still rely much on rain to wash away dirt and on isolation to ward off disease. They grudgingly give up the well and the spring for the hydrant, and close their eyes to the fact that the soil under them is not, as in the country, a source of all blessings, but the cause of their worst evils. heat their houses, cook their food and generate noises and odors as if their neighbors were miles away. Their parlors are not differentiated into places of comfort and intercourse, but remain as much a combination of museum, art gallery and storehouse as they would of necessity be if all the family treasures were crowded together into a two-room country cottage. Nor does home life free itself from the foreign elements which country isolation has forced into it. and thus put itself into touch with the many social institutions which city life makes possible.

The influence in cities of instincts due to a pain economy are as prominent as those of country conditions. The mental qualities and the type of morality most admired are those calculated to preserve life and ward off external dangers. These are ideals better fitted for a military campaign than for civic life. The fact that the best army officers so often fail when assigned to civic duties shows how different are the qualities which the two careers demand. A city morality. however, must be an off-duty morality rather than an on-duty morality. By this I mean that it is a morality less connected with the activities which preserve life and secure subsistence than with the periods between these activities. when pleasure is the leading interest. It is the morality of temptation rather than of danger; the morality of leisure rather than of work. If city civilizations could control the pleasures, amusements and temptations of the people, there would be little difficulty in regulating their activities during the working period. Even the lack of industrial efficiency is largely due to the evils of leisure.

These evils of a pleasure economy demand for their correction the growth of civic instincts fitted for the new conditions. No revival of or appeal to the instincts of a pain economy can bring success. There must be a slow growth of new instincts in harmony with the new conditions. primitive form of evolution must assert itself, in which the less fit for city life are not shielded from evils by the influence of the democratic ideals tending to distribute equally both the benefits and evils of city life, without regard to the merit or demerit of the individual. Such tendencies destrov the hope of a progressive evolution, which depends on the possibility of shielding the fit from temptation and exposing the unfit to some, at least, of the evils they create. If civic instincts fitted for city life once became powerful, democratic ideals might be allowed full play without any detriment to society, but at present their activity takes so much from the advantage of the strong and adds so much to the welfare of

the weak, that the resulting equality retards the development of a type of man whose civic instincts fit him for city life.

I do not mean that the democratic ideals are strong enough to equalize the distribution of wealth, of working hours or of the sources of enjoyment. The equality is not one of advantages but of disadvantages, an equality of temptation, and of susceptibility to disease and vice. A primitive evolution depends, not on the welfare of those who survive, but upon the conditions which determine who cannot survive. If the death rate is the same in all classes the type-producing tendencies on which progress depends are thwarted and the city remains a mere aggregate without any integrating tendencies.

The hindrances to city progress, however, lie more in an equality of temptation than in an equality of the death rate among the different classes. Temptation grows with wealth and opportunity, causing each class to have about the same percentage of those who are worthless to society. In the single environment which a city affords there is no way by which a class can isolate itself from these evils or from those who create them. Relief can only come from the growth of civic standards and of strong instincts against those who fail to live up to the standards. A class cannot isolate itself from society, but society can exclude from its privileges those who make bad uses of them.

A lack of the feeling of social solidarity does much to continue these evils. They cannot be avoided through the endeavors of individuals or classes to protect themselves. A slight reduction in the force of temptation, disease and vice in the whole community has much more permanent influence than a much larger change in the condition of individuals or of classes. Civic instincts must be general to be efficient, but this generality is prevented by individuals who have more confidence in their own endeavors than in those of the public. Such acts may shift the evils to other persons but they do not prevent or even reduce them.

So long, for example, as the favored classes imagine that they can avoid the evils of bad water by using filters, ice, mineral waters or other substitutes, they have little interest in the public water works and do not exert their influence to improve them. If individuals were allowed to establish private mails the public service would soon degenerate through the lack of interest which the favored classes would have in it. Just as national feelings and interest grow when the wealthy classes can no longer hire substitutes for the army, so also will civic instincts grow when all persons must seek protection from city evils through public measures. Social solidarity is but another name for those feelings which lead men to rely on general measures of relief instead of relying on their own efforts.

This feeling of social solidarity must, to be effective, be supplemented by the growth of æsthetic feelings. appetites and vices are best removed by a perception of the harmony of consumption. The gratification of æsthetic feelings depends upon public measures more clearly than does the gratification of other feelings. Men may eat, drink and sleep in private and care little for the enjoyment of their neighbors. They must, however, enjoy their æsthetic pleasures with others and suffer if the taste of their neighbors is bad. We all see the same streets, have the same amusements, and endure the same sights, noises and odors. All the unæsthetic elements in city life are forced upon every one's attention. No one can escape the evils which low æsthetic standards suffer to exist. The rich may supply their economic needs by private enterprise, but they cannot thus gratify their æsthetic wants. They must beautify and ornament the whole city and remove all its defects before their own æsthetic feelings can be satisfied. Their interests in this respect are the same as those of other people and must lead to a desire for public measures to promote them.

Violation of æsthetic standards, more than that of any other standard, arouses feelings of opposition and thus promotes the growth of civic instincts. In this way unæsthetic objects, acts and pleasures are driven from public places and are aggregated in special localities isolated from the general public. Those in whom the desires for these pleasures are still strong find ready means of gratifying them. The well-meaning citizen, however, has his temptations greatly reduced and his family can be reared without the depraving tendencies which the constant contact with crude temptations creates. The causes which have isolated the liquor traffic from other forms of business and driven it so largely into back streets or behind screened doors are æsthetic. The immorality of drinking intoxicants is as bad in one place as in another, and so far as moral motives oppose drinking they would prevent it entirely.

In the temperance agitation of the present time there are two distinct elements, one æsthetic and the other moral. The æsthetic feelings are disgusted by the disagreeable effects of drinking. They are irritated by public rioting and coarseness. The unæsthetic elements which drinking forces into the family life also cause feelings of repugnance. These feelings are satisfied when drinking is driven from the home and from public places. They only demand that the disagreeable objects be kept out of sight. There is no opposition to the evil-doer upon æsthetic grounds so long as he does not force himself upon public attention. Moral feelings, however, are aroused by the condition of the drinker and not by the disagreeable effects of drinking upon other people. They prompt endeavors to save the drunkard and to punish those who profit by his depravity. They exert their influence toward restoring the drunkard to his place in society and would compel society to receive him even to its detriment. Acting thus, moral feelings tend to check social differentiation and often injure society.

The economic instincts in isolation may exert a like influence. While they produce a differentiation in wealth, pleasures and consumption, they also in many cases tend

toward an equality of temptation and disease, and thus do not give any one type of man so marked an advantage as to enable it to displace other types. The different classes live side by side with no tendencies strong enough to unify society.

It is therefore to the growth of æsthetic feelings that we must look for the differentiating tendencies which compel progress in city life. The æsthetic feelings lead to the development of citizens with high standards of life and with civic instincts strong enough to drive those with lower standards into isolated localities. They free home life and public places from their worst evils and temptations, and allow the growth of more refined social feelings. The integrating tendencies can thus produce higher types of men and give them vantage ground for the displacement of the lower types. Æsthetic motives cannot create a perfect society, but they can overcome the present static tendencies and elevate city life to a plane where higher motives can become sources of further progress. Our present civilization has given to city people the possibility of satisfying their economic wants. Past civilizations created for them moral and religious motives. Thus three of the elements of progress are assured. The æsthetic forces alone are lacking. The residents of cities must win for themselves this requisite of progress and when they have secured it, the last obstacle in the way of a civilization higher than any the world has yet known will have been removed.

